

FEDERAL BUREAU OF INVESTIGATION
FOI/PA
DELETED PAGE INFORMATION SHEET
FOI/PA# 1204879-001

Total Deleted Page(s) = 84

Page 10 ~ b7D;
Page 14 ~ Duplicate;
Page 15 ~ b3 - Per CIA and FBI; b7D; b7E;
Page 16 ~ b7D;
Page 17 ~ Duplicate;
Page 18 ~ b7D;
Page 19 ~ Duplicate;
Page 20 ~ Duplicate;
Page 22 ~ Duplicate;
Page 23 ~ b3 - Per CIA and FBI; b6; b7C; b7D; b7E;
Page 24 ~ b3 - Per CIA and FBI; b7D; b7E;
Page 25 ~ b3 - Per CIA and FBI; b7D; b7E;
Page 26 ~ Duplicate;
Page 27 ~ Duplicate;
Page 37 ~ Duplicate;
Page 38 ~ Duplicate;
Page 39 ~ Duplicate;
Page 40 ~ Duplicate;
Page 41 ~ Duplicate;
Page 45 ~ Duplicate;
Page 46 ~ Duplicate;
Page 51 ~ Duplicate;
Page 54 ~ Duplicate;
Page 55 ~ b7D;
Page 58 ~ b7D;
Page 62 ~ Duplicate;
Page 67 ~ b7D;
Page 70 ~ b7D;
Page 71 ~ b7D;
Page 73 ~ b7D; b7E;
Page 74 ~ b7D; b7E;
Page 75 ~ b7D; b7E;
Page 76 ~ b7D; b7E;
Page 77 ~ b7D; b7E;
Page 78 ~ b7D; b7E;
Page 79 ~ b7D; b7E;
Page 80 ~ b7D; b7E;
Page 81 ~ b7D; b7E;
Page 83 ~ Duplicate;
Page 85 ~ Duplicate;
Page 87 ~ b3 - Per CIA; b7E;
Page 88 ~ b3 - Per CIA; b7E;
Page 89 ~ b3 - Per CIA; b7E;
Page 90 ~ b3 - Per CIA; b7E;
Page 91 ~ Duplicate;
Page 92 ~ Duplicate;
Page 93 ~ Duplicate;
Page 94 ~ Duplicate;
Page 95 ~ Duplicate;
Page 97 ~ b7D;
Page 99 ~ b7D;
Page 101 ~ Duplicate;
Page 102 ~ Duplicate;
Page 110 ~ Duplicate;
Page 113 ~ Duplicate;
Page 114 ~ Duplicate;
Page 120 ~ Duplicate;
Page 121 ~ b6; b7C; b7D;
Page 122 ~ b7D;
Page 123 ~ b7D;
Page 125 ~ b7D;
Page 126 ~ b7D;
Page 129 ~ Duplicate;
Page 132 ~ Duplicate;
Page 133 ~ Duplicate;
Page 134 ~ Duplicate;
Page 137 ~ Duplicate;

Page 138 ~ Duplicate;
Page 139 ~ Duplicate;
Page 140 ~ Duplicate;
Page 147 ~ Duplicate;
Page 157 ~ Duplicate;
Page 158 ~ Duplicate;
Page 159 ~ Duplicate;
Page 161 ~ Duplicate;
Page 162 ~ b7D;
Page 165 ~ b7D;
Page 166 ~ b7D;
Page 168 ~ Duplicate;
Page 169 ~ Duplicate;
Page 172 ~ Duplicate;
Page 174 ~ Duplicate;
Page 179 ~ Duplicate;
Page 180 ~ Duplicate;

XXXXXXXXXXXXXXXXXXXXXXXXX
X Deleted Page(s) X
X No Duplication Fee X
X For this Page X
XXXXXXXXXXXXXXXXXXXXXXXXX

JOHN EDGAR HOOVER
DIRECTOR



Federal Bureau of Investigation
United States Department of Justice
Washington, D. C.
March 24, 1942

16231

SJT:BT

MEMORANDUM FOR THE DIRECTOR

The Executive Conference was advised by Mr. Tracy of a suggestion by Messrs. Appel and Stanley of the Laboratory that ~~paper~~ formula of materials mixed with their own ingredients, the formula to be so adjusted that it will produce one of two results, i.e., (1) expose any attempt to use secret ink; (2) enable development of any secret ink by uniform tests. They point out that good paper must be difficult to secure in Europe for the reason that spies have been directed to bring back to Europe a supply of such paper.

The Conference, consisting of Messrs. Tolson, Tamm, Clegg, Ladd, Glavin, Nichols, Q. Tamm, Carson, Hendon, Hince and Tracy, were unanimously of the opinion that the suggestion was impractical because of its magnitude.

Respectfully,
For the Conference

Clyde Tolson
Chairman

W. R. Glavin
Secretary

cc Mr. Glavin

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED 323013
DATE 6/1/96 BY SP5 K11 BMS y

RECORDED

INDEXED

80-604-126
FEDERAL BUREAU OF INVESTIGATION
1 APR 2 1942
U. S. DEPARTMENT OF JUSTICE

Mr. Tolson ☒
Mr. E. A. Tamm ☒
Mr. Clegg ☐
Mr. Glavin ☐
Mr. Ladd ☐
Mr. Nichols ☒
Mr. Tracy ☒
Mr. Rosen ☐
Mr. Carson ☐
Mr. Coffey ☒
Mr. Hendon ☐
Mr. Holloman ☐
Mr. Quinn Tamm ☐
Mr. Harbo ☐
Tele. Room ☐
Mr. Nease ☐
Miss Beahm ☐
Miss Gandy ☐

UNRECORDED COPY FILED IN 66-2554

APR 15 1942

FEDERAL BUREAU OF INVESTIGATION

1-3

Date 3-24 1942

TO: Mr. Q. Tamm
 Mr. Engert
 Mr. Potter
 Mr. Bowles
 Mr. Buckley
 Mr. Hallett
 Mr. Saux
 Mr. O'Melia
 Mr. Assmus
 Mr. Quinn
 Mr. Anderson
 Miss Teller
 Mrs. Mann
 Mrs. Cox
 Mrs. Barr
 Mrs. Pagliaro
 Miss Pratte
 Mrs. Davis
 Miss Dawson
 Mrs. Sisson
 Mr. Miller
 Mr. Simpson
 Mr. Fallon
 Mr. Caldwell
~~Mr. Coffey~~
 Mr. Martin
 Mr. Baughman
 Mr. Blackburn
 Mr. Beach
 Mr. Conrad
 Mr. Pfafman
 Messengers
 Civil Service Desk

With reference to Appel and Stanley's suggestion requiring paper manufacturers to use a certain formula, the Conference was unanimously of the opinion it was not practical. With reference to the second and third suggestions as to censorship insisting that only certain types of paper and envelopes will be permitted for mail going to foreign countries and that paper and envelopes used by our own government could be specially prepared, it is suggested that they be more specific as to how this could be done from the practical standpoint.

ST

M
 Please Handle
 Post
 Correct
 Re-write
 Re-date
 See me
 Send file
 Note and return
 Initial
 Please sign
 Special filing

o. J. Dink

*1 gene. 9
 RW*

RECORDED
 APPEL

W. L. L.

Memo 4/1/42

80-604-127

FEDERAL BUREAU OF INVESTIGATION

20 APR 22 1942

U. S. DEPARTMENT OF JUSTICE

APR 23 1942

S. J. TRACY
 7639



ccs

Federal Bureau of Investigation
United States Department of Justice
Washington, D. C.

April 1, 1942

CAA:IG

MEMORANDUM FOR MR. COFFEY

The routing slip attached, stating the Conference believes the suggestion regarding control of manufacturing of paper impractical, asks that more specific information be given from the practical standpoint, as to how material used in mail going to foreign destinations may be controlled so as to secure desired results regarding use of invisible ink.

Secured Inks

There are of course various ways, such as through laws, governmental regulation or practical restriction, compelling or tending to cause the selection of special papers. There doesn't appear to be any great difficulty facing means taken to regulate, prevent or control improper use of the mails in war time. Certainly the regulations governing censorship, prohibit attempts to defeat observation of the contents of letters, such as use of invisible ink. So that such use renders the piece subject to condemnation, at least. Why it doesn't also provide punishment for the attempt would seem silly if this is so, but certainly means to enforce ways of bettering the censorship tests applied to a piece, are not lacking, and if properly sponsored and arranged would not cause any unjustified hardship or expense or inconvenience. This naturally is a matter for the consideration of those charged with drafting the laws, regulations and methods adopted for current use. Consideration of the idea does not seem to necessitate the proffer of drafts of such statutes. The use of the so called "Air Mail" type of materials would seem to indicate how use of particular materials may be secured by compulsion or merely by inducement.

As to details of the materials to be prescribed, this is also, as pointed out in the suggestion, is a matter which depends on the desired performance, whereas the suggestion concerns merely the adoption of control as a means of supervision of improper activities. If, for instance, it is desired to prevent the use of invisible ink entirely, this may be done by coating the paper with materials which dissolve or change color when solvents used in secret inks are applied. This would prevent writing with anything except visible ink. Such materials are of many varieties, the best for this particular purpose being dependent on experiments to be conducted. These experiments are neither problematical as to results nor costly as data is already available. For instance, through previous knowledge of manufacturing George La Monte Company are already able to furnish paper coated with leuco dyes which change color and run when wet. It is understood they have just sold a carload of such paper to the War Department for use in preparing safe envelopes. Such paper may be typed or written on, but not subjected to steam or invisible ink. When moisture is applied it changes from blue to green in color and if too much is applied it smears and runs. Such papers

Rx

Mr. E. A. Tamm	_____
Mr. Clegg	_____
Mr. Glavin	_____
Mr. Ladd	_____
Mr. Nichols	_____
Mr. Tracy	_____
Mr. Rosen	_____
Mr. Carson	_____
Mr. Coffey	_____
Mr. Hendon	_____
Mr. Holloman	_____
Mr. Quinn Tamm	_____
Mr. Harbo	_____
Tele. Room	_____
Mr. Nease	_____
Miss Beahm	_____
Miss Gandy	_____

RECORDED

INDEXED

80-604-127

APR 15 1942

JUSTICE

cc: conf memo 4-4-42

Page Two
Memorandum for Mr. Tracy

is already on the market and if specified for use in letters and envelopes to be sent abroad would go a long way toward eliminating the use of secret ink.

With reference to permitting (not preventing) the use of secret ink yet by regulation requiring the use of paper such as to invariably expose such use by uniform tests, the details of such a project concern from the practical standpoint, experiments with papers to produce the results desired. Until the results desired are known no such details are possible and as a practical matter such required paper should be periodically changed to anticipate counter measures.

German spies, desiring best results with invisible ink, now are instructed to select certain kinds of papers. These have a rough surface, are absorbent, and when held to the light present an appearance of non-uniformity of grain which is exactly the kind of appearance given by invisible ink on other papers. It is only necessary to withdraw use of such select papers to prevent this optimum advantage being given the spy. In other words, the regulation could enable the rejection or confiscation of all letters written on such paper.

But the project may go much further than this. Papers now used for airmail are thin, semitransparent and relatively smooth of surface. By slight change they can be made even more unsatisfactory for use with invisible ink or they can be improved for its use and at the same time adjusted to respond to treatment revealing the ink. This requires adjustment of the paper making machine so the finish will be less transparent, less hard, that is more absorbent, with a uniform texture without shadows resembling invisible ink. This requirement would not be a burden on manufacturers being met by simple adoption of a different dandy roll in all probability, one which will supply a finish already furnished in other papers, especially those with a fine laid grain. It is proposed to add to the mix for this paper, chemicals which when treated with reagents or when observed in infrared light or by some particular filter, shows a uniform color contrasting with any material added to the surface by any invisible ink. No deviation from manufacturing processes other than the addition of materials is required, and they are not costly or difficult. For instance, if common salt is added in a certain proportion (worked out by experiment) the entire paper should, when pressed against a sheet prepared with silver nitrate, cause a change in the same way as a fingerprint pattern. But this pattern depending as it does on the distribution of salt in the fibers of the paper, does not exist where the surface is prevented from coming in contact with the sheets by the surface pattern of the invisible ink writing. This then becomes visible as a negative line or absence of design, on the sheet. Metal salts of a particular kind which respond to sheets impregnated with materials not commonly found in invisible ink work, are preferable for this purpose so that the peculiar effect is not so readily observed by the Germans when they develop the invisible ink

Page Three
Memorandum for Mr. Coffey

by ordinary means. Our development would be, for instance, by light or by sheets turned to a different color chemically, whereas they would (for pyramidon) use ferric chloride-pot. ferricyanide as usual and change the color of the ink to blue. The background would contrast with the ink although perhaps not quite the color they now get for some papers. The presence of the salt would not be particularly suspicious and there is no reason why this ability to use the paper as a developer should become known. Even if it did it would simply place a hardship in the way of spy operations with secret ink.

To get the desired chemicals into the paper would require orders to the paper manufacturers specifying the finish, weight and substance acceptable for foreign mail and requiring the presence of so much percent of the desired chemical per square inch of paper. This would be so similar to current paper specifications for particular uses that the purpose would not necessarily be suspected nor if suspected would its operation be known, since development depends on knowledge of transference reactions not currently used in secret ink work. The paper would then be complementary to the test sheets which censorship or FBI can have made up. Two test sheets would be applied to suspected letters for tests and without spoiling the document, reproduce the invisible writing present.

Another way of getting the chemicals into the paper would be to require a special paper which is made from ordinary paper by coating (similar to safety papers). As soon as specifications are made known such papers would undoubtedly be manufactured by present manufacturers of safety paper, who have the equipment for coating. (The paper is run through a bath and then dried). This added operation would add cost of a small amount to each envelope and sheet and result in a particular finish in the way airplane papers are now different. Of course tests of papers used to see if they conform to the requirements would periodically be necessary but this can be made simple and be done on current mail by simple wetting for instance, depending on the coating applied.

These proposals require experiment of course, but it is submitted that this is desirable not an objection, since the process should be changed from time to time as indicated. If adopted there probably should be set up a joint Censorship Bureau of Standards-FBI committee of technicians to work out the exact material requirements. Mr. Miller suggests also that at present as a precautionary measure Censorship can if desired use a spray or fuming chamber process on all mail possibly containing invisible ink, to produce a chemical condition eliminating the development of any ink present.

With regard to Government papers, as you know, these have in the past been protected from theft to some extent by watermarks. (It is noted that some of the present papers neglect this). There are comparatively

Page Four
Memorandum for Mr. Coffey

few needs for absolute protection from alteration, forgery or surveillance. In such instances the paper used should immediately be considered by technical staffs in order to adopt means of protection. Envelopes for instance, may be made from Leuco dye coated papers, or such papers may be inserted in each piece as mailed, so as to reveal tampering. One requirement of such papers should be that they resemble ordinary paper yet cannot be tampered with without detection. Our own mail to distant, secret agents is not safe at the present time. We should produce by experiment the desired protection. This would result in specifications for instance and the purchase of paper according to these specifications. The details depend on selection of the kind of protection desired.

Protection from alteration:

Present safety papers are better than ordinary paper for this and could be used pending further experiment.

Protection from Surveillance:

Coat or incorporate in papers larger quantities of starch which would be white in appearance but change to blue when are used in ordinary moisture conditions.

b3 Per CIA
b7E

Protection from censorship of envelopes:

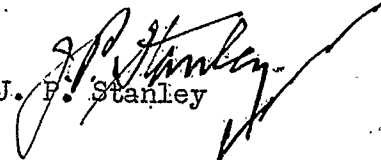
Bottom seams to be fastened by three different adhesives instead of one as at present, including, albumin, glue made heat resisting (several formulae are available) and with inside lining of water sensitive paper.

Upper last seam to be fastened by application of solution at time of closing by hand. Solution to contain binder of glue, mixed with albumin.

Additional protection may be supplied when desired on special envelopes by application of cellulose nitrate film to outside. (It is heated by iron and becomes part of paper preventing access to seam). The operation is simple requiring little effort or time.

Respectfully,


C. A. Appel


J. P. Stanley

JOHN EDGAR HOOVER
DIRECTOR



Federal Bureau of Investigation
United States Department of Justice
Washington, D. C.

April 4, 1942

SJT:jm

MEMORANDUM FOR THE DIRECTOR

With reference to the suggestion of Mr. C. A. Appel, for the control of the manufacturing of paper in the United States, i.e., as to how paper used in the mails going to foreign destinations might be controlled so as to secure favorable results on checking for the use of invisible inks, the Conference was advised that Messrs. Appel and Stanley of the Laboratory have studied this matter and have pointed out that it would be necessary to have certain chemicals put into the paper at the time of manufacture, that this would require that manufacturers put into the paper a definite percentage of the desired chemical per square inch. The desired chemicals could also be put into the paper and its use controlled by requiring that only a special type of paper be used in correspondence being sent out of the country.

Messrs. Appel and Stanley point out that the proposal would require experimentation since the process would have to be changed from time to time and it would probably be necessary to set up a joint committee of Censorship-Bureau of Standards-FBI, technicians to work out the exact material requirements.

The Conference consisting of Messrs. Tamm, Glavin, Nichols, Ladd, Rosen, Hendon, Holloman, Carson and Tracy, was unanimously of the opinion that while the suggestion has merit, the magnitude is such that favorable consideration at this time is not warranted.

Respectfully,
For the Conference

Clyde Tolson, Chairman

W. R. Glavin, Secretary

Mr. Glavin

RECORDED

80-604-128

APR 15 1942

U. S. DEPARTMENT OF JUSTICE



Mr. Tolson ✓
Mr. E. A. Tamm ✓
Mr. Clegg ✓
Mr. Glavin ✓
Mr. Ladd ✓
Mr. Nichols ✓
Mr. Rosen ✓
Mr. Tracy ✓
Mr. Carson ✓
Mr. Coffey ✓
Mr. Hendon ✓
Mr. Holloman ✓
Mr. McGuire ✓
Mr. Harbo ✓
Mr. Quinn Tamm ✓
Tele. Room ✓
Mr. Nease ✓
Miss Beahm ✓
Miss Gandy ✓

Secret Info

RECEIVED BY 66-20574

JPS:MAC
80292

May 27, 1942

80-604-130

RECORDED
EX-2
Mr. A. S. Harris
Vice President
Harris Seybold Potter Company
4510 East 71st Street
Cleveland, Ohio

Dear Mr. Harris:

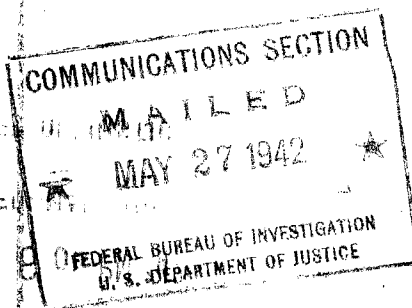
I wish to express my appreciation for the assistance and cooperation rendered by you in connection with your secret writing process and its specific developer.

This material has been placed in the hands of the Bureau's technicians for their information.

Sincerely yours,

cc - Cleveland

Mr. Tolson _____
Mr. E. A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Holloman _____
Mr. McGuire _____
Mr. Quinn Tamm _____
Mr. Nease _____
Miss Gandy _____



JPS:MAC

80282

May 27, 1942

80-604-130

Mr. William H. Wood
Director Chemical Research
Harris Seybold Potter Company
4510 East 71st Street
Cleveland, Ohio

Dear Mr. Wood:

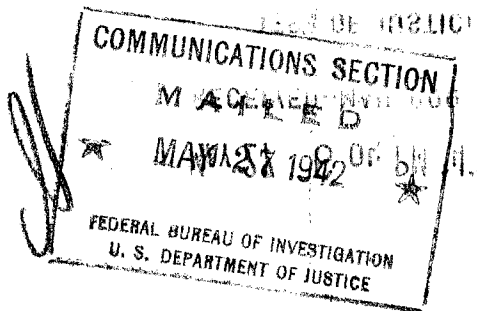
I wish to express my appreciation for the information and suggestions which you forwarded through our Cleveland Office to this Bureau in connection with your secret writing process.

You may feel assured that if in the future your cooperation is desired in regard to this matter the Bureau will not hesitate to call upon you.

Sincerely yours,

cc - Cleveland

Mr. Tolson _____
Mr. E. A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Holloman _____
Mr. McGuire _____
Mr. Quinn Tamm _____
Mr. Nease _____
Miss Gandy _____



5-13

Su

May 9, 1942

2

Re: ANALYSIS OF SECRET WRITING;
Harris Seybold Potter Company,
Cleveland, Ohio

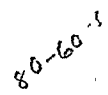
Reference is made to the Laboratory report dated April 16, 1942, file number 80-604-122, being Laboratory report number 73910, reporting the results of a document examination ~~writing~~ requested by letter from the Cleveland Office, dated March 18, 1942. Secret

UNRECORDED COPY TO INVEST. UNIT
ORIGINAL TO LABORATORY

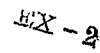
5-19-42

Very truly yours, ~~WILLIAM W. WALKER~~

ENCLO. 5
7



ans letters
9/25
jps



JPS:IG
5-2-42

MEMORANDUM FOR

b7D

In regard to your of April 30, 1942 the following information is in addition to that which you set forth and may be of assistance to you.

MAIL

INK

U.S.A. to Spain

U.S.A. to Sweden

U.S.A. to Portugal

U.S.A. to Italy

Spain to U.S.A.

Mexico to Portugal

To date no secret writing messages have come to our attention that have been written on any type of communication other than private letters.

b3 Per CIA
b7E

cc: Mr. Ladd

MAILED from Natl. Def. Div.

MAY 3 1942

Mr. Tolson
Mr. E. A. Tamm
Mr. Clegg
Mr. Glavin
Mr. Ladd
Mr. Nichols
Mr. Rosen
Mr. Tracy
Mr. Carson
Mr. Coffey
Mr. Hendon
Mr. Holloman
Mr. McGuire
Mr. Quinn Tamm
Mr. Nease
Miss Gandy

Grand Saline, Tex
May 21, 1942

Mr J Edgar Hoover
Washington D.C.

Dear Sir:

Some time ago
I discovered that the
urine from the Pitneys
and Bladder could
be used for an
Ink. I tried so I thought
this might be of interest
to our nation. I
took the URINE
dip an ink pen in
and will then I took
the paper and the writing
will come clear

Yours very truly
John Combs

RECORDED
INDEXED
80-9604-132
FEDERAL BUREAU OF INVESTIGATION
MAY 25 1942
U.S. DEPARTMENT OF JUSTICE

0 Invisible Writing

ENCLOSURE
MAY 25 1942
38 OCT 22 1942

MS
430 Dean St
Bklyn NY

BROOKLYN, N.Y.
MAY 22
12-PM
7942

BUY
DEFENSE SA
BONDS AND STAMPS

Pres Roosevelt
White House
Washington
D.C.

FILES DIVISION

F-18

51 OCT 16 1942 1942

TO:

☐ MR. PATTERSON ☐ SEARCHING UNIT
☐ MR. WAIKART ☐ NUMBERING UNIT
☐ MR. WILLETT Note Date
☐ MR. GERE Please return
☐ MR. McBRIDE ☐ TYPING UNIT
☐ MR. BROWN Please make _____ copies
☐ MR. SEYFARTH ☐ PERSONNEL FILES
☐ MR. MEDLER ☐ CONSOLIDATION UNIT
☐ MR. OLIVER ☐ FILING UNIT
☐ FRONT OFFICE ☐ CENTRAL HOLD DESK
☐ ROUTING UNIT
 Please block _____ copies ☐ M _____
 Note enclosures
☐ CLASSIFYING UNIT
 Note Card

☐ See Me ☐ Please Handle
☐ Phone Me ☐ Note and Return

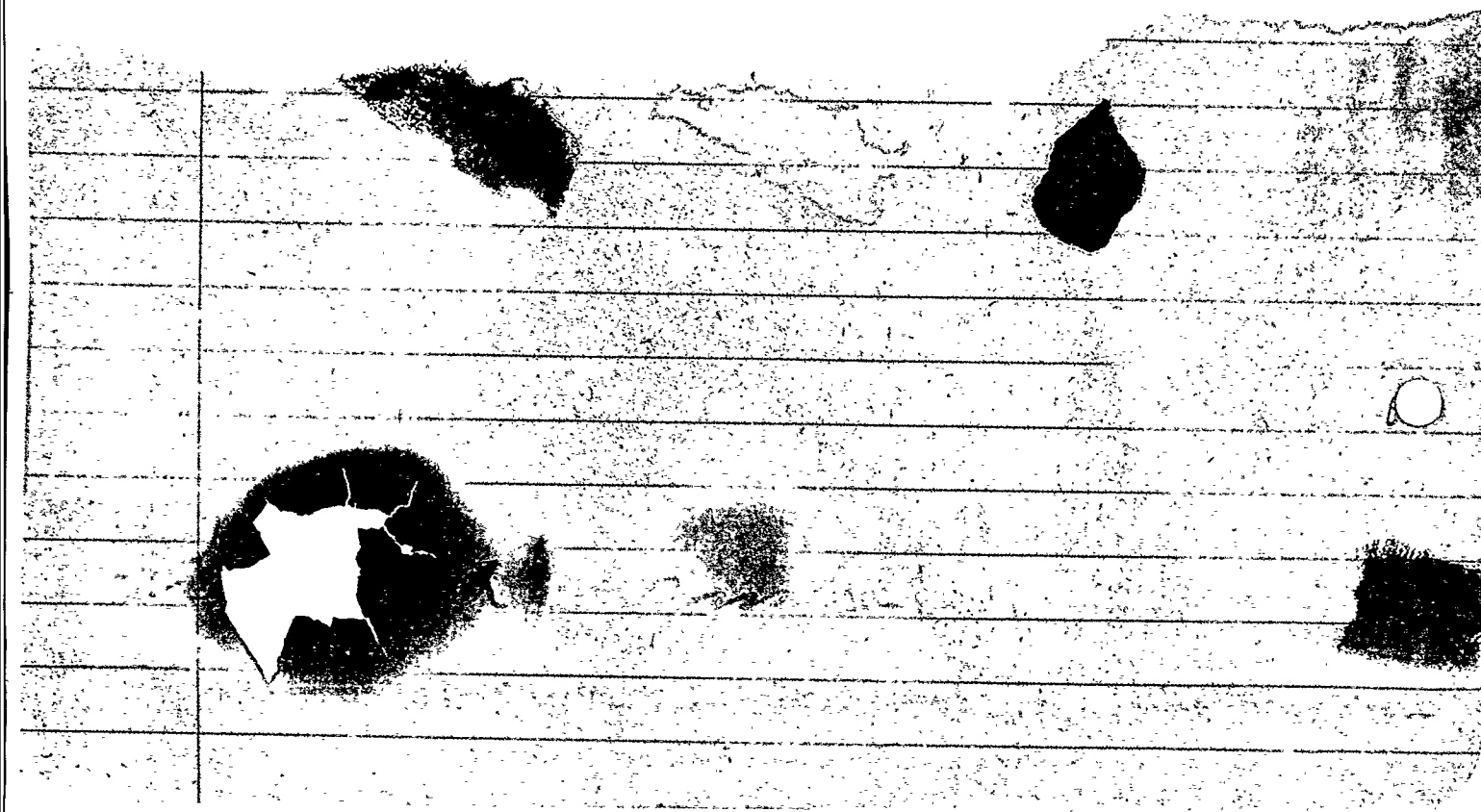
Envelope

Calvin

Sample

Federal Bureau of Investigation U.S. Dept. of Justice - 80-604-132

Sample



Pres. F. D. Roosevelt
 Dear Sir -
 The Germans have a secret
 way of writing - Can be read
 by holding up to the
 light & reading between
 the lines - I don't know
 if you know about it -
 It was taught to me

REC'D. BU. OF INV.
 MAY 29 1942

MISS M. BAKER

ACK 6/9/42
 JPO

RECORDED
 &
 INDEXED
 JPO

24 - mm

80-604-133	
FEDERAL BUREAU OF INVESTIGATION	
7 MAY 29 1942	
U. S. DEPARTMENT OF JUSTICE	
[Handwritten initials and signatures]	

Pres F D Roosevelt

Dear Sir-

The Germans have a secret way of writing-can be read by holding up to the light & reading between the lines-I dont know if you know about it-It was taught to me years & years ago by a German-

/s/ Miss M Baker
470 Dean St
Bklyn Ny

TRUE COPY
map

FEDERAL BUREAU OF INVESTIGATION
Laboratory

Date _____ 1942

___ Mr. Coffey	7326	___ Mr. Higdon	7325E
___ Mr. Martin	7326	___ Mr. Holland	7334
___ Mr. Appel	4235	___ Mr. Jenkins	7328
___ Mr. Arnold	7326	___ Mr. Jevons	7325E
___ Mr. Baughman	7325D	___ Mr. Larmoyeux	7326
___ Mr. Beach	7120	___ Mr. LaRock	7325E
___ Mr. Blackburn	7334	___ Mr. Magee	7325C
___ Mr. Blaine	7334	___ Mr. Marshall	7334
___ Mr. Bohn	7334	___ Mr. Merritt	1410
___ Mr. Conrad	1410	___ Mr. Mesnig	7334
___ Mr. Couch	7325D	___ Mr. Millen	1410
___ Mr. Dingle	4235	___ Mr. Miller	4235
___ Mr. Driscoll	7325C	___ Mr. Napier	7334
___ Mr. Dunlop	1410	___ Mr. Parsons	7325D
___ Mr. Feehan	4235	___ Mr. Pfafman	1410
___ Mr. Fitzhugh	7325	___ Mr. Schweitzer	1410
___ Mr. Frazier	7325D	___ Mr. Standley	7325F
___ Mr. Freimuth	7325F	___ Mr. Willard	7325D
___ Mr. Gasteiger	4235	___ Mr. White	7325F
___ Mr. Gormley	4235	___ Mr. M. Williams	7325D
___ Mr. Gould	7325	___ Miss Frawley	7326
___ Mr. Hesser	7325	___ Recorders	7325
___ 6th FLOOR FILES		___ Typing Pool	7325
___ Mr. _____		___ LABORATORY FILES	7325

See Me _____
Please Handle _____
Route to #1 Examiner _____

E. P. COFFEY
Room 7326

FIG:MRK

June 8, 1942

~~80-604-134~~

RECEIVED
JUN 10 1942

Mr. John Combs
Grand Saline, Texas

Dear Mr. Combs:

I am in receipt of your letter dated May 21, 1942, in which you submitted information relative to the use of urine as an invisible ink.

The information furnished by you is being retained in the files of the Bureau for reference and you may be assured that your interest in submitting this data to me is deeply appreciated.

Sincerely yours,

John Edgar Hoover
Director

RECORDED

80-604-134
FEDERAL BUREAU OF INVESTIGATION
JUN 10 1942
U. S. DEPARTMENT OF JUSTICE

DEPT OF JUSTICE

RECEIVED-MAIL ROOM

JUN 8 4 44 PM '42

JUN 15 1942

COMMUNICATIONS SECTION
MAILED 4
★ JUN 8 10:12 P.M.
FEDERAL BUREAU OF INVESTIGATION
U. S. DEPARTMENT OF JUSTICE

Mr. Tolson _____
Mr. E. A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. McGuire _____
Mr. Holloman _____
Mr. Hendon _____
Mr. Quinn Tamm _____
Mr. Nease _____
Miss Gandy _____

Deflection & Evaluation of as used,
invisible & against the use with &
not strong, including information
marking for random testing



**Federal Bureau of Investigation
United States Department of Justice
Washington, D. C.**

RRR:ef

May 16, 1942

Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Holloman _____
Mr. McGuire _____
Mr. Harbo _____
Mr. Quinn Tamm _____
Tele. Room _____
Mr. Nease _____
Miss Beahm _____
Miss Gandy _____

MEMORANDUM FOR MR. LADD

Re: EXPERIMENTS WITH DESTRUCTIBLE
INK BY THE NAVY DEPARTMENT.

Reference is made to the attached memorandum of Mr. Coffey to Mr. Tracy dated March 26, 1942, which has reference to experiments conducted by the Laboratory with a secret ink developed by Lieutenant Densford which could be destroyed by merely immersing in salt water. Reference memorandum carried the recommendation that the Liaison Section attempt to obtain further information concerning the ink because of its possible use to the Bureau.

Pursuant to this request, the writer contacted Commander J. L. Riheldaffer, Special Intelligence Section of ONI, and discussed with him the results of the Bureau's tests as set forth in Mr. Coffey's memorandum to Mr. Tracy of January 3rd, it being that regular tests given to reveal the original text of the material written by the secret ink have been used but without results. It was further called to Commander Riheldaffer's attention that there were numerous other tests that could be made provided the chemical contents of the ink were known and that inasmuch as these additional tests had not been given, it could not be stated that certain reagents could not be used to bring out the text of the writing where the secret ink had been used.

In this regard, Commander Riheldaffer stated he was not familiar with the chemical ingredients and that it was his understanding that Lieutenant Densford had called at the Bureau to discuss the matter further. He stated that he would get in touch with Lieutenant Densford to see if the desired information could be had and that he would also recommend that Densford contact the Bureau Laboratory if this had not already been done.

Respectfully,

R. R. Roach

COPY IN FILE

RECORDED
INDEXED

5 JUL 1 1942

6 JUN 20 1942

U.S. DEPARTMENT OF JUSTICE

EX-1

FOR DEFENSE



BUY
UNITED
STATES
SAVINGS
BONDS
AND STAMPS

Detection and Production of Secret Ink



**Federal Bureau of Investigation
United States Department of Justice
Washington, D. C.**

March 26, 1942

WGB:JR

MEMORANDUM FOR MR. TRACY *ET*

Re: Experiments of Destroyable
Ink by Navy Department.

With reference to the attached memorandums concerning the experiments of Lieutenant Densford of the Navy Department to develop an ink which could be destroyed by merely immersing in salt water; it is recommended that the supervisor who is acting as liaison between the Bureau and ONI endeavor to obtain further information concerning this ink because of its possible value to the Bureau.

Respectfully,

E. P. Coffey

E. P. Coffey

Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Tracy _____
Mr. Rosen _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Holloman _____
Mr. Quinn Tamm _____
Mr. Harbo _____
Tele. Room _____
Mr. Nease _____
Miss Beahm _____

Handled separately
J. M. [Signature]

3828

U. S. DEPT. OF JUSTICE
F. B. I.
MAR 26 1942
ENCLOSURE

RECORDED

80-604-135
FEDERAL BUREAU OF INVESTIGATION
6 JUN 20 1942
U. S. DEPARTMENT OF JUSTICE

COPY IN FILE

REC-111

80-604-133

June 9, 1942

JPC:rmb

Miss M. Baker
470 Dean Street
Brooklyn, New York

Dear Miss Baker:

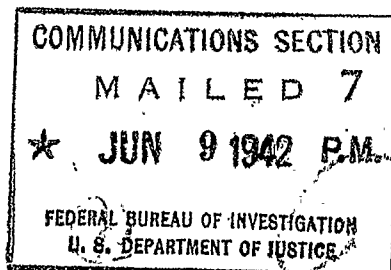
I wish to advise that your letter postmarked May 22, 1942, has been received at this Bureau by reference from the White House.

Your courtesy and interest in bringing this matter to the attention of the Federal Government are indeed appreciated. You may be assured that the content of your letter has been noted and will receive appropriate consideration.

Sincerely yours,

John Edgar Hoover
Director

Mr. Tolson _____
Mr. E. A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. McGuire _____
Mr. Holloman _____
Mr. Hendon _____
Mr. Quinn Tamm _____
Mr. Nease _____
Miss Gandy _____



U. S. DEPT. OF JUSTICE
FBI
RECEIVED-MAIL ROOM
JUN 8 2 33 PM '42

[Handwritten signature]

[Handwritten signature]

WLS:JMM
Transcribed 6-26-42

80-604-136

~~CONFIDENTIAL~~
BY SPECIAL MESSENGER

Brigadier General Hayes A. Kroner
General Staff
Chief, Military Intelligence Service
War Department
Washington, D. C.

Dear General Kroner:

For your information, there follow pertinent extracts submitted by the American Censorship System in connection with a letter dated April 24, 1942, from Hill Brothers, Salida, Colorado, to Walter Allan Davidson, Mile 2, Box 1487, Silver Camp, Balboa, Canal Zone:

"Cover contains printed slips of instructions for reading luminous card work and luminous card inks and card acknowledging receipt of order from addressee.

"The sender, a novelty firm, informs addressee that his order (Number 684) for goods is being shipped by insured mail that day.

"The instructions for reading luminous card work follows: 'Place the Glasses or Visor on, stand with back toward light and hold cards in front of you and you will see the dark squares indicating the code mark on every card. Luminous ink will show only on red cards.'

"The instructions for luminous card inks follow: 'First take a clean piece of white writing paper and lay in front of you where you intend to do your card marking. Dip brush into ink and then stroke it over this sheet of paper before applying it to the card. This is to prevent getting too much ink on the card. Too much ink on the card will make a blotch and ruin your work. We always send a full set of key cards on the Bee back for you to go by. This luminous ink can only be used with red cards and apply the ink to the red portion of the card. There never has been a luminous ink that will work on blue cards.'

COMMUNICATIONS SECTION

"Addressee has evident interest in luminous ink and card work."

★ JUN 29 1942

FEDERAL BUREAU OF INVESTIGATION
U. S. DEPARTMENT OF JUSTICE

Mr. Tolson _____
Mr. E. A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Kramer _____
Mr. McGuire _____
Mr. Quinn Tamm _____
Mr. Nease _____
Miss Gandy _____

59910

Brigadier General Hayes A. Kroner

- 2 -

You will observe that Hill Brothers acknowledge receipt of an order for luminous card inks, et cetera, and since it would appear that Davidson ordered this material for marking playing cards in such a way as to defraud others, it is thought advisable to bring this to your attention.

Sincerely yours,

John Edgar Hoover
Director



Federal Bureau of Investigation
United States Department of Justice
Washington, D. C.

June 23, 1942

CAA:AL

MEMORANDUM FOR MR. TRACY

Re: Postal Censorship Number 3194-42

The above intercept is a letter from Hill Brothers, Salida, Colorado to Walter Allan Davidson, Mile #2, Box 1487, Silver Camp, Balboa, Canal Zone. No copies of the writing were made and the original letter was released.

The comment states that the envelope contains printed slips of instructions for reading luminous card work and luminous card inks and acknowledging receipt of the order from the addressee. The sender is apparently a novelty firm.

It is obvious from the comment that subject in the Canal Zone ordered from this company a supply of luminous inks and other materials for marking playing cards in such a way as to cheat or defraud the remainder of the players through being able to read the marks through an eye shade which enables subject to see the marks he places on the cards and no one else. This material is evidently similar to that manufactured and supplied by other firms particularly in Chicago for the operation of fraudulent gambling games.

RECOMMENDATION: The purpose of this comment is to enable information concerning the activities of Davidson in the Canal Zone who is apparently operating fraudulent gambling devices to be forwarded to the authorities at the Canal Zone if desired, and also to record the name of the Hill Brothers, Salida, Colorado as one of the manufacturers of this type of equipment.

Respectfully,

E. P. Coffey

Addendum: This type of "invisible ink" can also be used for secret messages.

FOR DEFENSE



RECORDED
&
INDEXED
JUL 1 1942
4 - min

80-604-136
JUL 1 1942
FIVE

Mr. Tolson _____
Mr. E.A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Holloman _____
Mr. McGuire _____
Mr. Harbo _____
Mr. Quinn Tamm _____
Tele. Room _____
Mr. Nease _____
Miss Beahm _____

Miss Gandy _____
J. M. Kimball
J. B. Sheets

~~CONFIDENTIAL~~

NO 3194-42

Records No

b6
b7C

UNITED STATES OF AMERICA
THE OFFICE OF CENSORSHIP

Surface

Mail No.

For use in the case of Registered Letters
(If unregistered, insert "NONE")

NONE

Registered No.

Serial No.

FROM—

Hill Bros.
Salida
Colorado

To—

Walter Allen Davidson
Wile #2
Box 1487
Silver Camp
Bulboa
Canal Zone

Date of letter
(or postmark
if letter undated)

April 24, 1942

PREVIOUS RECORDS, IF RELEVANT.

NONE

Nos.

For interoffice use by A. C.
or D. A. C. only.

Allocation of this comment sheet:

C. P. C.

C. D. R.

Whether to be photographed—

No

If so, to whom photograph is to be sent—

DISPOSAL OF ORIGINAL LETTER—

Released, held, condemned
or sent with comment to—

RELEASED

ENGLISH

COMMENT

Cover contains printed slips of instructions for reading luminous card work and luminous card inks and card acknowledging receipt of order from addressee.

The sender, a novelty firm, informs addressee that his order (Number 684) for goods is being shipped by insured mail that day.

The instructions for reading luminous card work follows: "Place the Glasses or Visor on, stand with back toward light and hold cards in front of you and you will see the dark squares indicating the code mark on every card. Luminous ink will show only on red cards."

The instructions for luminous card inks follow: "First take a clean piece of white writing paper and lay in front of you where you intend to do your card marking. Dip brush into ink and then stroke it over this sheet of paper before applying it to the card. This is to prevent getting too much ink on the card. Too much ink on the card will make a blotch and ruin your work. We always send a full set of key cards on the Beo back for you to go by. This luminous ink can only be used with red cards and apply the ink to the red portion of the card. There never has been a luminous ink that will work on blue cards."

Addressee has evident interest in luminous ink and card work.

DB
IG
NEW
IP
JAA
XOO
JAA
WY

INT
EC
MC
MD
ON
FO
REC

FROM DIV. 2
Mr. Alden
Mr. Cunningham
Mr. Fitch
Mr. Hoeman

11
memo
3/42

FIC:JR

June 23, 1942

MEMORANDUM

b7D

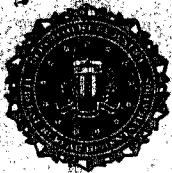
Reference is made to your memorandum [redacted]
dated June 5, 1942, regarding [redacted]
[redacted] For your information the inks referred to in
our undated memorandum were detected in unregistered air mail
letters.

Mr. Tolson _____
Mr. E. A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. McGuire _____
Mr. Holloman _____
Mr. Hendon _____
Mr. Quinn Tamm _____
Mr. Nease _____
Miss Gandy _____

MAILED FROM DIVISION FIVE

JUN 23 1942

Handwritten initials and marks, including a large "W" and "J" and a signature.



CAA:PW

Federal Bureau of Investigation
United States Department of Justice
Washington, D. C.

June 23, 1942

MEMORANDUM FOR MR. TRACY

RE: [redacted] request for information
Memo [redacted] May 25, 1942

Mr. Tolson _____
Mr. E.A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Holloman _____
Mr. McGuire _____
Mr. Harbo _____
Mr. Quinn Tamm _____
Tele. Room _____
Mr. Nease _____
Miss Beahm _____
Miss Gandy _____

b7D

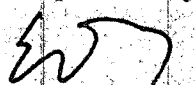
b7D

[redacted]

[redacted] There is attached a list of the most commonly known books such as might be the subject of cross examination in court in the United States. That which has the widest distribution is "Questioned Documents" by Osborn, especially among trial counsel, whereas among older lawyers "Forgery" by D. T. Ames is better known. This, however, is entirely out of date now. A few books on general laboratory subjects are included being basic required general reading in training of examiners.

The Bureau indorses no author, indeed finds much claimed which is out-dated or not experimentally verified. In the United States no character analysis of handwriting is recognized. Identification of handwriting and typewriting is practiced solely on the basis of analysis of form peculiarities resulting from characteristics of the individual person or machine of a fixed or recurring nature. Appreciation of the value of these in order to enable sound conclusions as to identity is acquired in the FBI laboratory by long assignment as apprentice, formal lecture and study courses, experiment with prepared specimens and review of a large number of difficult and peculiar cases which have been found to present problems encountered. Evidence of disguise and simulation require special handling being difficult of understanding without adequate specimens of proven experimental value.

Respectfully,


E. P. Coffey



ENCLOSURE

JUL 10 1942

Criminal Investigation (Preferably 1st Edition) - Hans Gross.
Forged, Anonymous and Suspect Documents - A. J. Quirke.
Questioned Documents - A. S. Osborn.
Forgery - D. T. Ames.
Contested Documents and Forgeries - F. Brewster.
Fundamentals Graphologic etc. - J. Crepieux Jamin.
Documents and Their Scientific Examination - C. A. Mitchell.
Scientific Aids for the Study of Manuscripts - R. B. Haselden.
Books and Documents - Julius Grant.
Disputed Documents - Hagan.
Faults and Fallacies of Handwriting Identification - Hardless and Hardless.
40 Years of Ink - Carvalho.
The Question of Expert Examination of Handwriting - Doudon.
Experimental Graphology - Robert Saudek.
Anonymous Letters - Robert Saudek.
"Can Different Writers Write Identical Hands"? - Robert Saudek.
Disputed Handwriting - Jerome B. Lavay.
Forensic Chemistry - Lucas.
Legal Medicine - Smith and Glaister.

80-64-139

FEDERAL BUREAU OF INVESTIGATION

Date 6/6 1942

___ Director	___ Mr. Hince
___ Mr. Tolson	___ Mr. Carlson
___ Mr. E. A. Tamm	___ Mr. Donaldson
___ Mr. Clegg	___ Mr. Espey
___ Mr. Glavin	___ Mr. Gatins
___ Mr. Ladd	___ Mr. Hicks
___ Mr. Nichols	___ Mr. McCabe
___ Mr. Rosen	___ Mr. Meyers
___ Mr. Tracy	___ Mr. Muzzey
___ Mr. Egan	___ Mr. F. T. McIntyre
___ Miss Gandy	___ Mr. Prescott
___ Mr. Gurnea	___ Mr. Robey
___ Mr. Harbo	___ Mr. Rogers
___ Mr. Hendon	___ Mr. Santoiana
___ Mr. Carson	___ Mr. Treadwell
___ Mr. E. H. Laughlin	___ Mr. _____
___ Mr. McGuire	
___ Mr. Pennington	___ Miss Biles
___ Mr. Renneberger	___ Mrs. Griggs
___ Mr. Q. Tamm	___ Miss Carroll
	___ Miss Dunaway
___ Chief Clerk's	___ Miss Heath
Office	
___ Division Five	___ Miss Moraine
___ Files Section	___ Mr. McCluskey
___ Mail Room	___ Miss Soule
___ Mechanical Sec.	
___ Personnel Files	___ See me
___ Supply Division	
___ Technical Lab.	___ Phone me
___ Washington Field	___ Send file
	___ Note and return
___ FHLB Building	___ Please handle
___ Quantico	___ Please forward
	___ File our files

Room _____

For consideration
by Exec. Conf.

54 JUL 14 1942

AHC
 DIVISION TWO
Shulkin

Mr. Tolson _____
Mr. E. A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Kramer _____
Mr. McGuire _____
Mr. Harbo _____
Mr. Quinn Tamm _____
Tele. Room _____
Mr. Nease _____
Miss Beahm _____
Miss Gandy _____

b6
b7C



JFS:FGB
80-604

Federal Bureau of Investigation
United States Department of Justice
Washington, D. C.

MEMORANDUM FOR MR. TRACY

At the request of Mr. Little of the Bureau the attached blind memorandum, containing information on the types of secret inks known to the Bureau to be used by German espionage agents, was prepared for the Office of Censorship.

Respectfully,

E. P. Coffey
E. P. Coffey

*cc furnished to [unclear]
for Censorship
7/27/42*

*ENCLO. 12
+ [unclear]*

RECORDED



56 AUG 8 - 1942

COPY IN FILE

80-604-140
FEDERAL BUREAU OF INVESTIGATION
12 JUL 21 1942
U. S. DEPARTMENT OF JUSTICE

~~CONFIDENTIAL~~

MEMORANDUM

b3 Per CIA
b7E

DEPT OF JUSTICE
B-1

RECORDED

COPY IN FILE

ENCLOSURE

80-604-140	
FEDERAL BUREAU OF INVESTIGATION	
12	JUL 21 1942
U.S. DEPT. OF JUSTICE	U.S. DEPT. OF JUSTICE

[Handwritten signatures and initials over the stamp]

JPS:FCB
80-604

July 18, 1942

~~CONFIDENTIAL~~

MEMORANDUM

b3 Per CIA
b7E

Mr. Tolson _____
Mr. E. A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Kramer _____
Mr. McGuire _____
Mr. Quinn Tamm _____
Mr. Nease _____
Miss Gandy _____

FILE COPY

80-604-140

July 6, 1942

MEMORANDUM

b7D

Reference is made to your of May 25, 1942.

There is attached a list of the most commonly known books such as might be the subject of cross examination in court in the United States. That which has the widest distribution is "Questioned Documents" by Osborn, especially among trial counsel, whereas among older lawyers "Forgery" by D. T. Ames is better known. This, however, is entirely out of date now. A few books on general laboratory subjects are included being basic required general reading in training of examiners.

The Bureau indorses no author, indeed, finds much claimed which is out-dated or not experimentally verified. In the United States no character analysis of handwriting is recognized. Identification of handwriting and typewriting is practiced solely on the basis of analysis of form peculiarities resulting from characteristics of the individual person or machine of a fixed or recurring nature. Appreciation of the value of these in order to enable sound conclusions as to identity is acquired here by long assignment as apprentices, formal lecture and study courses, experiment with prepared specimens and review of a large number of difficult and peculiar cases which have been found to present problems encountered. Evidence of disguise and simulation require special handling, being difficult of understanding without adequate specimens of proven experimental value.

Mr. Tolson _____
 Mr. E. A. Tamm _____
 Mr. Clegg _____
 Mr. Glavin _____
 Mr. Ladd _____
 Mr. Nichols _____
 Mr. Rosen _____
 Mr. Tracy _____
 Mr. Carson _____
 Mr. Coffey _____
 Mr. Hendon _____
 Mr. Kramer _____
 Mr. McGuire _____
 Mr. Quinn Tamm _____
 Mr. Nease _____
 Miss Gandy _____

MAILED FROM DIVISION FIVE

JUL 8 1942

Handwritten signatures and initials:
 [Signature] [Signature] [Signature]
 [Initials] [Initials] [Initials]

JWM:MAC
80-604

August 12, 1942

Mr. Carl Beust
National Cash Register Company
Dayton, Ohio

Dear Mr. Beust:

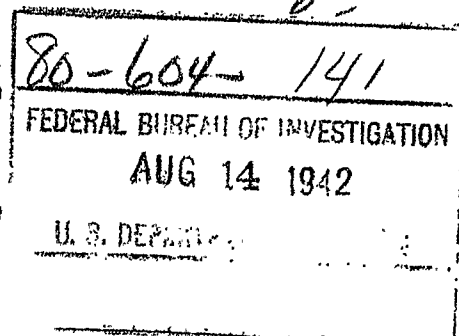
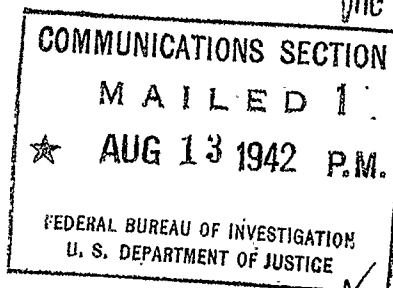
Reference is made to your visit to this Bureau's Technical Laboratory on March 19, 1942 at which time you discussed a new type of ~~typewriting~~ paper which could be used on an ordinary machine without a ribbon.

It would be deeply appreciated if you would forward several samples of this type paper to me at the Federal Bureau of Investigation, Technical Laboratory, Washington, D. C. It would be further appreciated if you would advise as to the type emulsion and cell arrangement that is used to hold the chemicals and how these materials are applied to the paper. You may be assured that any information you furnish me in connection with this matter will be treated as strictly confidential and will not fall into the hands of unauthorized persons.

Sincerely yours,

John Edgar Hoover
Director

Mr. Tolson _____
Mr. E. A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Kramer _____
Mr. McGuire _____
Mr. Quinn Tamm _____
Mr. Nease _____
Miss Gandy _____



AUG 17 1942

Detection and Production of secret,
invisible ink and writing

80-604-42

August 14, 1942

JEL:ECR

RECORDED

&

INDEXED

FOR [REDACTED]

b7D

Reference is made to your memorandum [REDACTED] dated July 8, 1942, requesting replies to certain questions [REDACTED]

With reference to question number one [REDACTED] we are aware of no definite mail routes being employed save those mail drops or suggested mail drops [REDACTED]

b7D

Concerning question number two [REDACTED]

[REDACTED] there has been no indication that either type is used exclusively.

Concerning your question number three [REDACTED]

[REDACTED] we have noted that both air and sea mail is used. We have failed to note any concentrated employment of registered mail in this respect.

Secret inks known to be used by the enemy are comprised of the following:

b3 Per CIA
b7E

r. Tolson _____
r. E. A. Tamm _____
r. Clegg _____
r. Glavin _____
r. Ladd _____
r. Nichols _____
r. Rosen _____
r. Tracy _____
r. Carson _____
r. Coffey _____
r. Hendon _____
r. Kramer _____
r. McGuire _____
r. Quinn Tamm _____
r. Nease _____
ss Gandy _____

Of this group of inks, [REDACTED] appear to be the most widely used.

Concerning your inquiry regarding [REDACTED]

Ray Robinson was the name used by Duane M. Popov, [REDACTED]

A letter sent under the name of Joseph Davis contained messages [REDACTED] which secret ink was also employed in the letters sent by Grace Buchanan-Dinsen.

COMM STAMP
8/15/42
ON ORIGINAL

INITIALS ON ORIGINAL

ORIGINAL FILE IN

b7D

80-604

August 28, 1942

CAA:KSL

MR. TRACY

Re: Special safety paper used
by prisoners in U. S.
Internment Camps [redacted]

b7D

In a previous memorandum attention was invited to the use of coated paper by interned prisoners. The purpose is to prevent the use of invisible ink. Mr. Burton secured samples of these forms and advice has been received that all correspondence by internees and prisoners of war must be written on these coated forms. The attached bundle of postal intercepts shows that a large number of these communications have been condemned apparently because the paper bears an imprint of other writing with which it came in contact, the censor finding that the sensitized surface reacts to the ink even though contact was made after the ink was well dried and blotted. It is possible that all of these intercepts contain the same transfer. Apparently the examiner considered it undesirable to permit transferred writings to go out although he states that the message itself is harmless.

Copies of the intercepts were apparently furnished MID but it is not clear that the interested officers in the War Department who selected the paper have been advised that the paper reacts to dried ink.

b7D

[redacted]

It would appear desirable, if possible, to secure samples of paper used by other countries such as England, Australia, Japan, Germany, Italy and South American countries. The Laboratory desires to keep in touch with all such matters and is studying the use of materials for safety purposes in the manufacturing of paper for war use. At such time as sufficient samples are secured it is proposed to conduct experiments designed to show the relative safety of different papers.

31 2 06
30
Respectfully,

3 - 1942
E. P. Coffey

Copy for Mr. Ladd

RECORDED 80-604-143

bet EX-15
0
X

JEL:ECR

August 24, 1942

FOR [REDACTED]

Reference is made to your memorandum [REDACTED]
dated August 17, 1942, requesting [REDACTED]

Your attention is invited to my memorandum dated
August 14, 1942, in which this information was previously
furnished in accordance with your request concerning [REDACTED]

Regarding [REDACTED]

[REDACTED]

Mr. Tolson _____
Mr. E. A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Kramer _____
Mr. McGuire _____
Mr. Quinn Tamm _____
Miss Gandy _____

58 JAN 11 1943

RECEIVED NO STYLING

b7D

b7D

b7D

ORIGINAL FILED IN 100-1769-10835



WSC:ef

Federal Bureau of Investigation
United States Department of Justice
Washington, D. C.
August 20, 1942

Mr. _____
Mr. E. _____
Mr. Clegg _____
Mr. Foxworth _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Carson _____
Mr. Drayton _____
Mr. Quinn Tamm _____
Mr. Hendon _____
Mr. Coffey _____
Mr. Harbo _____
Tele. Room _____
Tour Room _____
Mr. Nease _____
Mr. Tracy _____
Miss Beahm _____
Miss Gandy _____

MEMORANDUM FOR MR. LADD

The attached communication was handed to the writer
by [redacted]
[redacted] has requested that this communication be examined by the
Laboratory for secret writings. It will be noted that this communi-
cation is addressed [redacted]

b7D
b7E

[redacted] has requested that this matter be expedited [redacted]

b7D
b7E

Respectfully,

W. S. Crawford
W. S. Crawford

ADDENDUM

WSC:ggm
8/24/42

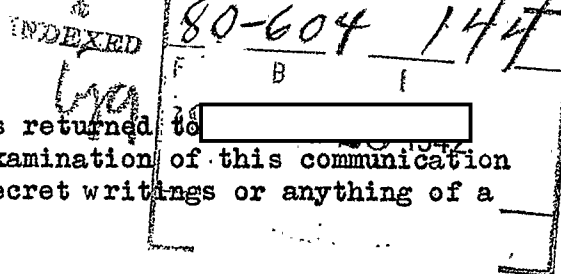
The above-referred to communication was returned to [redacted]
today and it was pointed out that an examination of this communication
by the Laboratory failed to disclose secret writings or anything of a
cryptographic significance.

b7D
b7E

Respectfully,

W. S. Crawford
W. S. Crawford

381
18 SEP 4 1942



COPY AND SPECIMENS RETAINED IN LABORATORY
SPECIMENS RETAINED IN LABORATORY
4-8-42 - de

FEDERAL BUREAU OF INVESTIGATION
UNITED STATES DEPARTMENT OF JUSTICE

L-40⁸

Laboratory Work Sheet

Re:

[Redacted]
[Redacted] Informant

File # 80-604-111
Lab. # 88111 Doc
88115 SW
89426 Crypt

b7D

b7E

Examination requested by: Bureau

80-604-421

Date of reference communication: Memo from Crawford to
Ladd 8-20-42

Date received: 8-21-42
ds

Examination requested:

Result of Examination: Doc - Doc(SW) - Crypt

Examination by: Stanley
Appel

Specimens submitted for examination

[Redacted]

b7D

b7E

Above listed evidence has been photographed using Lab. No. 88111

ORIGINAL EVIDENCE RETURNED

80-604-421



CAL:MAC

Federal Bureau of Investigation
United States Department of Justice

Washington, D. C.

September 22, 1942

Mr. Tolson _____
Mr. E. A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Kramer _____
Mr. McGuire _____
Mr. Harbo _____
Mr. Quinn Tamm _____
Tele. Room _____
Mr. Nease _____
Miss Beahm _____
Miss Gandy _____

b7D
b7E

MEMORANDUM FOR MR. TRACY

Re:

The evidence listed below was submitted to the Technical Laboratory with a memorandum from Supervisor Crawford to Assistant Director Ladd dated August 20, 1942 and received in the Laboratory August 21, 1942. The original evidence was photographed and examined for the presence of secret ink and returned to Supervisor Crawford:

80-604-14

b7D
b7E

Further study will be given the instant message and if additional information is secured an additional report will be submitted.

The above specimens were examined for the presence of secret ink and microphotographic dots with negative results.

The handwriting on the instant evidence was compared with the material contained in the File of Writings pertaining to National Security without effecting an identification. A photographic copy of the handwriting is being added to the file for further comparison.



Respectfully

E. P. Coffey

80-604-144 X
RECORDED
INDEXED
SEP 20 1942

109 185
11 OCT 10 1942

b7D
b7E

Federal Bureau of Investigation
United States Department of Justice

Washington, D. C.

January 5, 1940

Mr. S. F. Pickering

SECRET INKS AND METHODS FOR
THEIR DETECTION

In the F.B.I. Law Enforcement Bulletin dated June, 1939 is an article entitled "Secret Writing with Sympathetic Ink". That article dealt with the various preliminary visual examinations conducted for the detection of invisible writing together with a discussion of the use of ultra-violet light for this purpose with an appended table listing various substances used for invisible writing, their reactions when exposed to ultra-violet light, and the method or methods for developing secret writing written by means of each substance. This paper is concerned principally with the method of examining a suspected document after the preliminary visual tests and the exposure to ultra-violet light fail to indicate the presence of any secret writing and relates for the most part to the use of [redacted] as a general development. b3 Per CIA b7E

Because of the state of war in Europe and, as a consequence, the censorship imposed upon the various kinds of communications, it is to be expected that recourse will be had to the use of secret writing for transmitting messages which would otherwise be stopped by the sensors particularly in the case of a nation at war. An idea of the frequent use to which secret writing was put can be obtained by a review of the file of Marie K. De Victorica (Bureau file OG 2423) a German spy who was arrested on Long Island in 1918. Various other individuals who were connected with Madame Victorica were also arrested at various times. Numerous letters involving these people were intercepted at various times and in many cases messages of secret ink were developed. These spies also admitted that they used secret ink to a considerable extent and gave descriptions of the methods which they used for writing and developing messages. It is apparent, however, that these individuals did not know the identity of the substances used except in isolated instances and merely used materials that had been furnished them. It is noted that although the question of secret ink is repeatedly brought up throughout the various reports in this file, there was only found one

381
COPY 4 SEP 10 1942
IN FILE

RECORDED

80-604-145
11 SEP 7 19 2

16-26

LL: EOD

August 17, 1942

FOR

In accordance with the request contained in your memorandum of August 6, 1942, there is attached a partial bibliography on handwriting and typewriting identification.

As pointed out in our note of July 10, 1942, these works are required reading for qualifying a man to testify in court, but it must not be assumed that all or any are to be accepted as correct in fact, since many erroneous or out-of-date statements appear in these books.

Attachment

Mr. Tolson _____
Mr. E. A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Holloman _____
Mr. McGuire _____
Mr. Quinn Tamm _____
Mr. Nease _____
Miss Gandy _____

401
50 SEP 28 1942

ORIGINAL FILED IN 100-769-11279

b7D

b7D

CC MR. LADD

50 RECORDED

80 664-147

1068

September 11, 1942

FOR

b7D

Conformable with the request contained in your note of September 2, 1942, there is attached a copy of our Memorandum to you dated July 6, 1942,

Enclosure

ORIGINAL FILED IN 100-769-1142

Mr. Tolson _____
Mr. E. A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Kramer _____
Mr. McGuire _____
Mr. Quinn Tamm _____
Mr. Nease _____
Miss Gandy _____

MAILED FROM DIVISION FIVE

SEP 12

50 SEP 28 1942

JES:MAC

16226

RECORDED

September 14, 1942

NO. 86
SERIES 1942INDEXED
9

SAC	ALBANY	DETROIT	MEMPHIS	PROVIDENCE
	ATLANTA	EL PASO	MIAMI	RICHMOND
	BAZTIMORE	GRAND RAPIDS	MILWAUKEE	ST. LOUIS
	BIRMINGHAM	HONOLULU	NEWARK	ST. PAUL
	BOSTON	HOUSTON	NEW HAVEN	SALT LAKE CITY
	BUFFALO	HUNTINGTON	NEW ORLEANS	SAN ANTONIO
	BUTTE	INDIANAPOLIS	NEW YORK	SAN DIEGO
	CHARLOTTE	JACKSON	NORFOLK	SAN FRANCISCO
	CHICAGO	JUNEAU	OKLAHOMA CITY	SAN JUAN
	CINCINNATI	KANSAS CITY	OMAHA	SAVANNAH
	CLEVELAND	KNOXVILLE	PHILADELPHIA	SEATTLE
	DALLAS	LITTLE ROCK	PHOENIX	SIOUX FALLS
	DENVER	LOS ANGELES	PITTSBURGH	SPRINGFIELD
	DES MOINES	LOUISVILLE	PORTLAND	WASHINGTON, D. C.
				QUANTICO

Dear Sir:

It has recently been discovered that the Laboratory has not been receiving all the material pertaining to secret inks and secret writing which has passed through the hands of various supervisors and officials.

It is therefore desired that each supervisor, when handling such material as intercepts, reports and statements which contain information concerning secret inks and secret writing, make a check to determine if said material has been reviewed by the Laboratory. It is vitally important to National Defense that the Laboratory should have at its disposal all available material on this subject.

Very truly yours,

J. E. Hoover
John Edgar Hoover
Director

Mr. Tolson _____
Mr. E. A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Kramer _____
Mr. McGuire _____
Mr. Quinn Tamm _____
Mr. Nease _____
Miss Gandy _____

35
5051-4-342
MAILED

JES

JOHN EDGAR HOOVER
DIRECTOR



Federal Bureau of Investigation
United States Department of Justice
Washington, D. C.

16230

September 14, 1942

MEMORANDUM FOR MR. HOOVER	CUNNINGHAM	PATTERSON
TOLSON	EGAN	PENNINGTON
TAMM, E. A.	FITCH	RENNEBERGER
CLEGG	HARBO	SKOUSEN
GLAVIN	HENDON	STRICKLAND
LADD	HINCE	TAMM, Q.
NICHOLS	KIMBALL	TIMM
ROSEN	KRAMER	TRAYNOR
TRACY	LAUGHLIN, R. H.	WACKS
ALDEN	McGUIRE	WAIKART
CARSON	MUMFORD	AND SUPERVISORS
COFFEY	NEASE	

Dear Sir:

It has recently been discovered that the Laboratory has not been receiving all the material pertaining to secret inks and secret writing which has passed through the hands of various supervisors and officials.

It is therefore desired that each supervisor, when handling such material as intercepts, reports and statements which contain information concerning secret inks and secret writing, make a check to determine if said material has been reviewed by the Laboratory. It is vitally important to National Defense that the Laboratory should have at its disposal all available material on this subject.

Very truly yours,

J. E. Hoover

John Edgar Hoover
Director



1 SEP 26 1942

80-604-148

JOHN EDGAR HOOVER
DIRECTOR



JPS:MAC

Federal Bureau of Investigation
United States Department of Justice
Washington, D. C.

August 22, 1942

MEMORANDUM FOR MR. TRACY

Attached hereto is a memorandum suggested for the Director's signature, to be issued to all supervisors and Bureau officials in regard to sending information concerning secret inks and secret writing to the Laboratory for review.

Respectfully,

E. P. Coffey
E. P. Coffey

RECORDED

EX-18

16228

Mr. Tolson	_____
Mr. E. A. Tamm	_____
Mr. Clegg	_____
Mr. Glavin	_____
Mr. Ladd	_____
Mr. Nichols	_____
Mr. Rosen	_____
Mr. Tracy	_____
Mr. Carson	_____
Mr. Coffey	_____
Mr. Hendon	_____
Mr. Holloman	_____
Mr. McGuire	_____
Mr. Harbo	_____
Mr. Quinn Tamm	_____
Tele. Room	_____
Mr. Nease	_____
Miss Beahm	_____
Miss Gandy	_____

80-604-148

17 SEP 22 1942

EDGAR HOOVER
DIRECTOR



JAM:EGK

Federal Bureau of Investigation
United States Department of Justice
Washington, D. C.

September 14, 1942

MEMORANDUM FOR MR. TRACY

RE: Testing of Obliterating Inks
for the Army

Mr. E. A. Tamm
Mr. Clegg
Mr. Glavin
Mr. Ladd
Mr. Nichols
Mr. Rosen
Mr. Tracy
Mr. Carson
Mr. Coffey
Mr. Hendon
Mr. Kramer
Mr. McGuire
Mr. Harbo
Mr. Quinn Tamm
Tele. Room
Mr. Nease
Miss Beahm
Miss Gandy

Lieutenant France Fraz of the Military Planning Section of the Army, Extension 3012, called, stating that the Quartermaster General's Office was experimenting with inks to obliterate markings on Army equipment, such as canvas, etc. The purpose was to hide the identity of units which were going into combat. He inquired whether the Bureau would examine some of the material which had been obliterated on canvas and give them a report as to the effectiveness of the obliterating ink.

He was advised that if such specimens which had been prepared by them were submitted to the Bureau with a formal request from a ranking officer, the Bureau would make such examinations and render a report. He requested that all conceivable means be utilized to determine the effectiveness of the inks.

Respectfully,

E. P. Coffey
E. P. Coffey

DEFERRED RECORDING



4/10
5 SEP 28 1942

RECORDED
&
INDEXED
DSO

80-604-149
F B
4 SEP 17 1942
E. P. Coffey



Federal Bureau of Investigation
United States Department of Justice
Washington, D. C.

September 21, 1942

Mr. Tolson _____
Mr. E. A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Kramer _____
Mr. McGuire _____
Mr. Harbo _____
Mr. Quinn Tamm _____
Tele. Room _____
Mr. Nease _____
Miss Beahm _____
Miss Gandy _____

CAA:KSL

MEMORANDUM FOR MR. TRACY

Re: Safety Paper

For purposes of record, the Laboratory has received several new types of envelopes from South American countries particularly, the protection of which consists of printed letters arranged in lines on the inside of the envelope surfaces. There is one of these that uses the letters "acemnorsuvwzz", thirteen letters. Of course such a half an alphabet could be used for code or cipher purposes. There is no indication where this particular envelope is manufactured but it is probable that it is in the United States as it is used by an Army private in writing home from Panama. A photostatic copy has been substituted for the original, 100-0-15149, and the original detached in order that it may be retained in the Laboratory file.

Respectfully,

E. P. Coffey

RECORDED
&
INDEXED

NB8

80-604-150	
F	B
6	SEP 26 1942



7 461 SEP 30 1942

Secret Writing

Denver, Colorado
October 7, 1942

Director
Federal Bureau of Investigation
Washington, D. C.

Re: EXPLOSIVES, SECRET INKS,
AND CIPHERS

Dear Sir:

There is being enclosed herewith a copy of a letter exhibited to the Denver Office by Mrs. M. W. WIGGENTON, Assistant Librarian of the Denver Public Library.

Mrs. WIGGENTON came to this office and requested more definite information concerning the contents of this letter. She was advised to contact G-2 for further information; however, it will be noted that the letter states that she should report to this office any information concerning parties calling for books at the library relative to explosives, secret inks, and ciphers.

It will further be noted that the letter stated she should remove from the shelf all books and other materials dealing with explosives, secret inks, and ciphers, and she stated this would be a difficult task due to the fact that there are so many books in the library at the present time including encyclopedias, etc., having this information.

It is requested that this office be furnished with any information you have received from the War Department concerning the attached letter.

Very truly yours,

GORDON A. NICHOLSON
Special Agent in Charge

ESJ:JR
Enc.

ENCL: 1
7/1/52
OCT 21 1942

RECORDED

EX-104

80-604-151	
FEDERAL BUREAU OF INVESTIGATION	
NOV 12 1942	
U. S. DEPARTMENT OF JUSTICE	
SEARCHED	FILE

ORIGINAL FILED IN 62-346

C
O
P
Y

AMERICAN LIBRARY ASSOCIATION

Executive Offices
520 North Michigan Ave.
Chicago, Illinois

September 4, 1942

~~Confidential~~

To the Librarian:

You are requested by the Secretary of War to withdraw from open shelves and general use all books and other materials dealing with explosives, secret inks, and ciphers.

Such materials should not hereafter be available for use while the United States is at war unless the person desiring to use them can satisfy the chief librarian or his designated representative that such use is entirely legitimate.

The names and addresses of all persons making requests to use the material, whether the requests are granted or not, should be furnished promptly to the local office of the Federal Bureau of Investigation.

Yours very truly

/signed/

CARL H. MILAM
Executive Secretary

CHM-W
B

~~Confidential~~ - as it affects national defense
and comes under the Espionage Act.

80-604-151

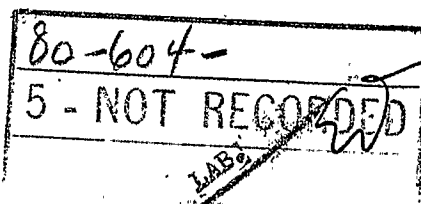
ENCLOSURE

INSTRUCTIONS IN THE USE OF THE ULTRA-VIOLET
LIGHT FOR THE DETECTION OF SECRET INK

1. Carefully observe the instruction sheet accompanying the ultra-violet light for best performance and maintenance of the instrument.
2. All examinations must be made in a dark room.
3. Your eyes must be given time to become accustomed not only to the darkness but also to the ultra-violet light. The examination should then be carried out by a close and not a casual scrutiny of the suspected document.
4. On examining the document, it must be kept in mind that there are three types of fluorescence which may be observed. A brilliant type which cannot be missed and consequently is almost never encountered in espionage cases. A second type is light characters on a darker background and is often difficult to recognize. This type too is very seldom encountered but substances known to be used by German agents will under certain conditions exhibit this type of fluorescence. The third type consists of dark figures on a lighter background. This is called absorptive fluorescence and is the type which may be expected to be most encountered in your examination since many of the current secret inks used by axis agents will exhibit this type if their instructions for the preparation of the secret ink and the secret writing have not been closely followed. In other words in the detection of the modern espionage inks the ultra-violet light, by itself, is practically valueless if the agents have followed their instructions perfectly.
5. Under the ultra-violet light paper fibers and imperfections often look like letters of the alphabet in either printed or written form. Unless there is evidence of a line of such characters or a line of writing little significance should be given to the individual marks.
6. The beginner should examine different types of known blank paper under the ultra-violet light in order to become acquainted with the various forms that paper fibers and imperfections may take in this light.

In closing it must be remembered that the ultra-violet light examination is only one of many examinations which may be conducted on suspected documents and that a negative ultra-violet test is absolutely no proof that there is no secret ink on the document. As stated above its chief value lies in picking up the axis agent's mistakes.

59 OCT 27 1942
RECEIVED



b6
b7C



Federal Bureau of Investigation
United States Department of Justice
Washington, D. C.

RHC:EGK:GWH

November 3, 1942

80-604

~~HIGHLY CONFIDENTIAL~~

MEMORANDUM FOR MR. TRACY

Re: New Secret Inks

- Mr. Tolson
- Mr. E. A. Tamm
- Mr. Clegg
- Mr. Glavin
- Mr. Ladd
- Mr. Nichols
- Mr. Rosen
- Mr. Tracy
- Mr. Carson
- Mr. Coffey
- Mr. Hendon
- Mr. Kramer
- Mr. McGuire
- Mr. Harbo
- Mr. Quinn Tamm
- Tele. Room
- Mr. Nease
- Miss Beahm
- Miss Gandy

Mr. Stanley of the Laboratory requested that directed search be conducted by Mr. Chambers in an effort to develop inks which could be used in a transfer method of secret ink writing. As a result of Mr. Chambers' experiments, the following methods are set forth for your consideration.

The sample in the envelope marked "Specimen I" is a type of writing which contains the secret message in the text of the cover letter. The attached 3" x 5" piece of paper was painted [redacted]

b3 Per CIA
b7E

The quantities were roughly a "pinch" of each solid in a tablespoon of alcohol. After drying, the treated face was rubbed well with another sheet of paper.

The typewritten cover letter was prepared a line at a time and the concealed message superimposed upon it by inserting the "carbon paper" prepared as described above between the ribbon of the typewriter and the characters to be indicated on the cover letter. Then the key corresponding to the correct character was struck with normal force, so as to leave a small deposit of [redacted] upon the face of that character. To reveal the message, the face of the letter was treated with [redacted] After a few days, the developed characters fade.

b3 Per CIA
b7E

The sample in the envelope marked "Specimen II" contains a message in a dry type of invisible ink written on the reverse side of the sheet. A "carbon paper" was prepared by rubbing evenly into a sheet of bond paper a little [redacted] to which approximately 10 per cent of [redacted] had been added.

b3 Per CIA
b7E

In preparing the invisible writing on Specimen II, the paper intended to receive the message was laid upon a smooth hard surface, and the "carbon" or transfer paper laid face down upon it. The writing was then impressed through the "carbon," using a blunt stylus such as the rounded end of a fountain pen. Finally, the face of the secret message was rubbed a few seconds with a piece of similar paper. Development is with [redacted] solution.

b3 Per CIA
b7E



ENCLOSURE ATTACHED

RECORDED

80-604-152
F B I
5 NOV 24
EX-4

58 FEB 12 1943

Memorandum for Mr. Tracy

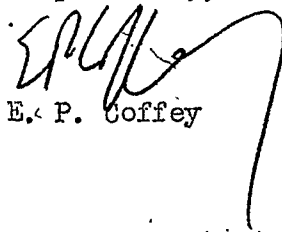
Page Two

It is pointed out that the method of Specimen II can be accomplished entirely with materials commonly available in the field. Neither of the methods described are detected by the ordinary physical and chemical tests routinely applied in secret ink detection; in order to detect and develop either, a solution would have to be applied which permanently stains the paper. However, as will be set forth in a future memorandum, a method has been recently discovered in the Laboratory which will allow for the detection and reading of secret writing without staining the document. This method is not believe^{b3} Per CIA to be known outside the Laboratory. ^{b7E}

Specimen I was prepared August 22, 1942, and the first five lines developed October 28, 1942; Specimen II was prepared October 28, 1942. Other samples of the II type were tested after standing two months with good results.

The above described methods were developed in the Laboratory and are herewith made a matter of record in the event that some future use for them may arise.

Respectfully,



E. P. Coffey

August 22, 1942

News Inc.

Washington, D. C.

Gentlemen:

A rather unusual alibi was given recently when a fugitive wanted for a violation of the National Motor Vehicle Theft Act was taken into custody. He advised that the automobile salesman gave him the keys and allowed him to drive the car. Later, according to the thief's story, he called the salesman and asked whether it would be satisfactory to drive his wife home. He indicated that he did not state where the home was, but that the salesman stated such a trip would be satisfactory. The car was thereupon driven to another state.

We trust this is the type of story you desire.

Sincerely,

Des Moines, Iowa, September 1, 1900.

re n t s s t s o a was
l a v i l g n d w e r s n a t b
f i o n i i b o r

FEDERAL BUREAU OF INVESTIGATION
UNITED STATES DEPARTMENT OF JUSTICE
WASHINGTON, D. C.
OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE TO AVOID
PAYMENT OF POSTAGE, \$300.

Specimen I

10/27/42

Dear Bob,

Well, I guess by the time you receive this letter you'll be one of Uncle Sammy's boys. I've been working pretty hard on my parents to try and convince them that I ought to be in one of the branches of the armed forces. As soon as I receive permission I'm going to try to get into the Naval Air Corp. If I don't make it there I'm going to try the Army Air Corp, but if they don't take me in the Navy I probably couldn't make the Army anyway.

Well, enough of that. How is school going anyway? I hope it's not getting you down. I don't suppose you are going to school now, though. That drilling all day long can't be too bad. I don't imagine you'll get much training. From what I hear they aren't holding the boys too long in the training camps. If you get a chance don't forget to slap a Jap for me. Maybe I'll get a chance before long.

Just keep yo r neck in and don't get in the way of any of that Jap lead. Watch yourself.

Sincerely,

George

DIRECTOR



Federal Bureau of Investigation
United States Department of Justice
Washington, D. C.

November 10, 1942

~~STRICTLY CONFIDENTIAL~~

MEMORANDUM FOR MR. TRACY

RE: NEW SECRET INK
DEVELOPERS

Mr. E. A. Tamm
Mr. Clegg
Mr. Glavin
Mr. Ladd
Mr. Nichols
Mr. Rosen
Mr. Tracy
Mr. Carson
Mr. Coffey
Mr. Hendon
Mr. Kramer
Mr. McGuire
Mr. Harbo
Mr. Quinn Tamm
Tele. Room
Mr. Nease
Miss Beahm
Miss Gandy

b6
b7C

RHC:VAF
80-604

At the request of Mr. Stanley of the Laboratory, Mr. Chambers conducted research for the purpose of discovering "non-staining" developers specific for German secret inks, particularly [REDACTED]. It is to our advantage at times to intercept and read a secret ink message and then to send it on without detection of the development by the recipient. The methods described below are a result of Mr. Chambers' research:

b3 Per CIA
b7E

Writings in [REDACTED] have been revealed in the past by treatment with [REDACTED] a solution which permanently stains the paper. The new method, a stainless and much more delicate test, is one in which the document is merely exposed to the vapors from a one percent solution [REDACTED] in alcohol. The writing becomes visible as a bright yellow fluorescence under ultraviolet radiation but cannot be seen in ordinary light. This fluorescence is removed almost completely by exposure of the document to acid vapor for a few moments. In connection with this developer it is noted that when it is used in conjunction with Method II [REDACTED] as submitted to you in my memorandum dated November 3, 1942, the [REDACTED] may be used in such low concentration as to prevent detection with [REDACTED] developer yet be revealed by this new test.

b3 Per CIA
b7E

At the present time [REDACTED] writings are developed by the application of [REDACTED] solution which produces a blue fluorescence under ultraviolet radiation. As a result of a series of experiments it was found in the Laboratory that [REDACTED] writing may be developed temporarily without wetting the document by passing [REDACTED] over it, whereupon the writing appears as a bright blue fluorescence under ultraviolet radiation. This fluorescent quality is then destroyed by momentary exposure of the document to ammonia vapor.

b3 Per CIA
b7E

The above described methods are thought to be of considerable value and will therefore be made a part of the Laboratory's examination of questioned material for the detection of secret inks pending your approval. To my knowledge these methods are not used outside this Laboratory.

Respectfully,

E. P. Coffey



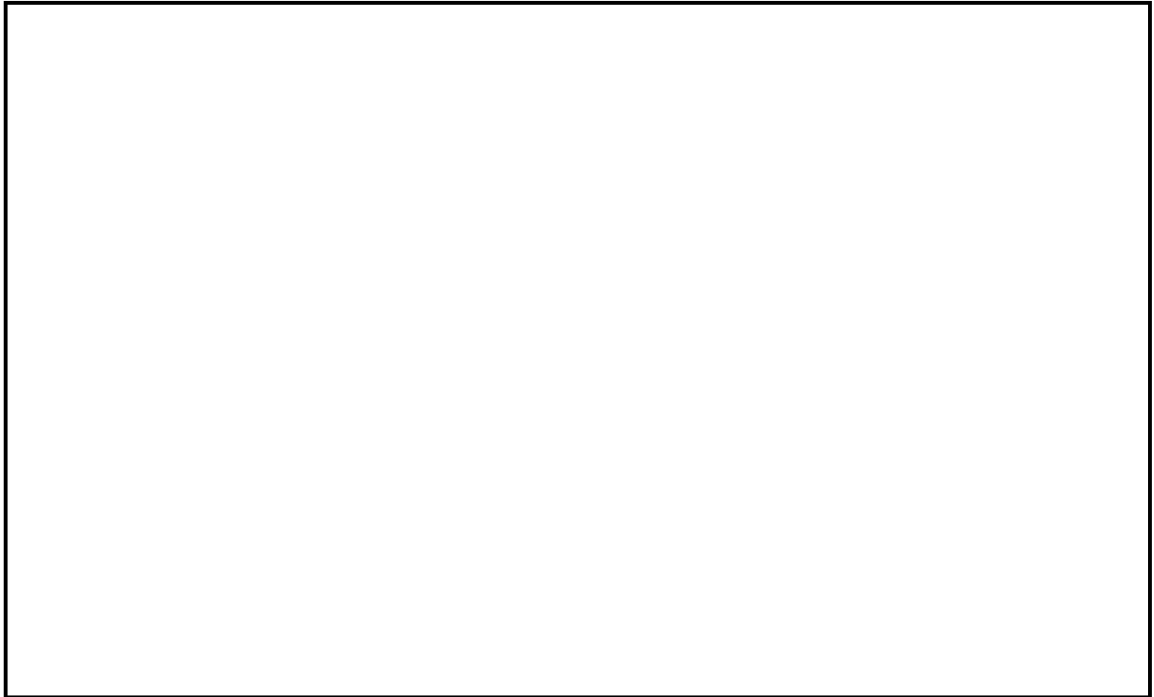
52 JAN 14 1943

80-604-153

ek
off-tensions and Productions of secret, in width
and synthetic inks and writing

80-604

MEMORANDUM FOR MR. EDMUND P. COFFEY



b7D

RECEIVED
JAN 7 11 53 AM '43
FEDERAL BUREAU OF INVESTIGATION
U.S. DEPARTMENT OF JUSTICE

RECORDED & INDEXED

DEC 12 1942

80-604-155
B I
14 DEC 1 1942

LAB
CPC
JPG

also Jpg

58 DEC 5 1942

FEDERAL BUREAU OF INVESTIGATION
Laboratory

Date 1/7/4 1942

Mr. Coffey	7326	Mr. Holland	7334
Mr. Martin	7326	Mr. Jevons	7325E
Mr. Appel	4235	Mr. Kyl	4235
Mr. Arnold	7326	Mr. Larmoyeux	7326
Mr. Baughman	7325D	Mr. LaRock	7325E
Mr. Beach	7120	Mr. Magee	7325C
Mr. Blackburn	7334	Mr. Marshall	4235
Mr. Blaine	4235	Mr. McVay	4235
Mr. Bohn	4235	Mr. Merritt	1410
Mr. Conrad	1410	Mr. Mesnig	7334
Mr. Couch	7325D	Mr. Millen	1410
Mr. Cronin	1410	Mr. Miller	4235
Mr. Davis	4235	Mr. Napier	7334
Mr. Dingle	4235	Mr. Parsons	7325D
Mr. Driscoll	7325C	Mr. Pfafman	1410
Mr. Dunlop	1410	Mr. Schweitzer	1410
Mr. Feehan	4235	Mr. Schumley	7325F
Mr. Frazier	7325D	Mr. White	7325F
Mr. Freimuth	7325F	Mr. M. Williams	7325D
Mr. Gasteiger	4235	Miss Frawley	7326
Mr. Gormley	4235	Mr. Tierney	7325
Mr. Gould	5700Corr	Typing Pool	5700 Corr.
Mr. Hiestand	7118	Recorders	5700 Corr.
Mr. Higdon	7325E	LABORATORY FILES	5700 Corr.
6th FLOOR FILES		Miss Westenberg	7322 Bk. 6
M		Miss Wolfe	7322 Bk. 6
		Miss Rupp	7322 Bk. 6

Please file
JPB

See Me _____
Please Handle _____
Route to #1 Examiner _____

E. P. COFFEY
Room 7326



TDB:GWH

Federal Bureau of Investigation
United States Department of Justice
Washington, D. C.

November 24, 1942

MEMORANDUM FOR MR. TRACY

Re: Visit of Captain R. J. Lefebvre
and Miss M. L. Olson of OSS.

The above called at my office and requested information concerning a possible secret ink utilizing the principle of fluorescence but one which would not fluoresce in ultra-violet light. The development in this case being accomplished by exposure to special photographic plates. Captain Lefebvre was advised that the Bureau had no information whatever concerning such an ink. The Captain stated that he believed it might be possible that the Germans were using a similar type of ink, but that he had no definite information to confirm it. He indicated that if anything were developed by his organization, they would furnish us with that information.

Respectfully,

E. P. Coffey
E. P. Coffey

Mr. Tolson _____
Mr. E. A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Kramer _____
Mr. McGuire _____
Mr. Harbo _____
Mr. Quinn Tamm _____
Tele. Room _____
Mr. Nease _____
Miss Beahm _____
Miss Gandy _____



RECORDED
&
INDEXED

DEC 31 1942

80-604-156

JOHN EDGAR HOOVER
DIRECTOR



Federal Bureau of Investigation
United States Department of Justice
Washington, D. C.

November 19, 1942

JPS:VAF

80-604

MEMORANDUM FOR MR. TRACY

Re: ~~X~~ Triple Test for Dampening

Attached hereto is a blind memorandum to [redacted]
requesting information on a so-called [redacted]
[redacted] as set forth in Mr. Hince's Memorandum for the
Director, Re: [redacted]

Respectfully,

E. P. Coffey
E. P. Coffey

Mr. Tolson _____
Mr. E.A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Kramer _____
Mr. McGuire _____
Mr. Harbo _____
Mr. Quinn Tamm _____
Tele. Room _____
Mr. Nease _____
Miss Beahm _____
Miss Gandy _____ b7D

RECORDED & INDEXED

80-604-157

6 DEC 1 1942

31 DEC 12 1942



*Detection of product is a secret,
invisible and synthetic ink &
writing, including in visible. No king
for reasons money*

*encl. not rec'd
in class. fig*

Mr. Tolson _____
Mr. E. A. Tamm _____ b6
Mr. Clegg _____ b7C
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Kramer _____
Mr. McGuire _____
Mr. Harbo _____
Mr. Quinn Tamm _____
Tele. Room _____
Mr. Nease _____
Miss Beahm _____
Miss Gandy _____



JPS:GWH

Federal Bureau of Investigation
United States Department of Justice
Washington, D. C.

November 25, 1942

MEMORANDUM FOR MR. TRACY

Re: Secret Ink Information Requested
by Colonel Bissell.

see 80-602-84

Reference is made to the attached memorandum to Mr. Cunningham from Mr. R. R. Roach, in which Colonel Bissell requests that information in regard to the mechanics of the secret writing, chemical constituents of the inks used, and chemical reagents needed to develop the secret message be furnished him in regard to the secret ink methods which the 8 Nazi saboteurs brought into the country.

Colonel Bissell was recently given the names of the secret inks used by the 8 Nazi saboteurs, as well as those used by Herbert Karl Friedrich Bahr. It is pointed out that at that time, a request was made only for the names of the chemicals used as secret inks, and thus no technical data as to the writing and development of these inks was forwarded to him.

Attached hereto is a blind memorandum to Colonel Bissell, in which is set forth the requested data.

Respectfully,

E. P. Coffey
E. P. Coffey

Attachments



58 DEC 19 1942

RECORDED
&
INDEXED

D42

80-604-158
4 DEC 8 1942

80-604

November 25, 1942

~~STRICTLY CONFIDENTIAL~~

MEMORANDUM FOR COLONEL BISSELL

In regard to the secret ink used by the eight Nazi saboteurs, you will recall that this consisted of an ordinary match stick whose head was composed of [redacted]. In writing with this implement, the saboteurs were instructed to use it in the manner of a pencil, the paper being placed on a smooth, hard surface, using very little pressure, and subsequent to the writing of their message, to dampen the paper with a solution consisting of 15 drops of ammonia in a cupful of water. The paper is then allowed to dry thoroughly and is pressed in some convenient manner such as the use of a heavy book, etc. The saboteurs had no idea how this was to be developed. However, it is quite easily developed by treating with a dilute solution of [redacted] and then placing the document under the ultra-violet light. The [redacted] formed gives forth a fairly brilliant fluorescence.

b3 Per CIA
b7E

In regard to the secret ink which Herbert Karl Friedrich Bahr brought into the country, as you will recall, this was found to be [redacted]. This ink was hidden in the subject's clothes and luggage and consisted of a ball of white cotton, in the center of which was a small yellowish-colored ball of cotton. The color was caused by the impregnation of the cotton with the [redacted]. The ink was prepared from this small yellow ball as follows: The ball was placed in 30 cc. of faucet water and was allowed to soak for about 15 minutes. The cotton was then removed. A writing implement was prepared by placing cotton around the end of a sharp toothpick. Bahr was told to use a "hammered paper" for best results. The paper, when being written upon, should be on a hard, clean, smooth surface, and the writer was instructed to avoid getting any fat or sweat marks on the paper. He was told to print in capital letters only, and told to write lengthwise on the back of the visible text. After writing the message, the ink should be allowed to dry for one hour and the letter is then rinsed under a faucet on both sides until no indentations can be seen. The paper is then pressed and pressed in the most convenient manner possible. After drying and [redacted], the paper is then to be rubbed with another piece of the same type [redacted] paper for 5 to 10 minutes in a circular motion. The best developer for [redacted] ink has been found to be a solution composed of [redacted].

b3 Per CIA
b7E

Mr. Tolson [redacted]
Mr. E. A. Tamm [redacted]
Mr. Clegg [redacted]
Mr. Glavin [redacted]
Mr. Ladd [redacted]
Mr. Nichols [redacted]
Mr. Rosen [redacted]
Mr. Tracy [redacted]
Mr. Carson [redacted]
Mr. Coffey [redacted]
Mr. Hendon [redacted]
Mr. Kramer [redacted]
Mr. McGuire [redacted]
Mr. Quinn Tamm [redacted]
Mr. Nease [redacted]
Miss Gandy [redacted]

The first two [redacted] chemicals are dissolved in 15 cc. of water, and after complete solution, the [redacted] is added. The solution is applied to the paper, and the writing develops on light steaming. Bahr also received instructions for preparing a pyrenidone ink by placing a pyrenidone tablet in 3 tablets of 60% alcohol. He was to print as above. He was to use an alcohol bath, blot, dry, and rub down as above.

b3 Per CIA
b7E

In regard to letters received by the eight saboteurs, they were to develop secret writing on them by treating the documents with a solution of cigarette ashes in water. The ink in all probability being [redacted]

b3 Per CIA
b7E

RECORDED

80-604-158

Delivered to
Col. Bissell
for notation
on memo
of copy to [redacted]
11/25/42

Page Two
Memorandum for Colonel Bissell

In regard to letters received by Bahr, he was to develop secret writing by taking a [redacted] dissolve it in about two tablespoonfuls of water, to which a little ammonia is added in order to clear it, and carefully spread this solution on the secret message by means of a cotton swab. The color of the developed message will be dark to black-brown, and after one hour or so, vanish or merge into the background. He was thus told to develop only small portions of the message at a time so as not to lose any part.

b3 Per CIA
b7E

The above information is forwarded to you upon your request, and it is hoped that your office will forward to this Bureau any additional information it may have on secret writing methods employed by German agents.

b6
b7C

JPS:GWH
80-604

November 27, 1942

1936

MEMORANDUM FOR [redacted]

b7D

Reference is made to [redacted]

Information concerning the secret ink found on this communication [redacted] would be deeply appreciated, particularly the method or methods used in the detection or development of the secret ink message and the chemical constituents of the secret ink, if possible.

b7D

MAILED FROM DIVISION FIVE

DEC 1 1942

RECORDED
&
INDEXED
D173

80-604-159

FEDERAL BUREAU OF INVESTIGATION
DEC 11 1942
U. S. DEPARTMENT OF JUSTICE

ORIGINAL FILE IN 100-779-12804

Unreadable Writing

42-226

HMC:tlc

December 18, 1942

~~PERSONAL AND CONFIDENTIAL~~

SIS#396

Re: Heinz August Luning, with aliases;
Espionage - G.

An intensive study by Laboratory technicians of the secret inks prepared by the captioned subject in his communications with the enemy has resulted in the definite conclusion that [] was so used. It will be recalled that Luning claimed that he had used inks of an entirely different base than the above.

b3 Per CIA
b7E

It is, therefore, apparent that Luning did not give accurate information to the investigators in this matter and the assumption naturally arises that he may have withheld other information of value or supplied erroneous data in connection with his past activities.

The above information is being submitted to you in order that you might better evaluate the data supplied by him in connection with the ramifications of this case presently being investigated.

Very truly yours,

John Edgar Hoover
Director

Mr. Tolson _____
Mr. E. A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Kramer _____
Mr. McGuire _____
Mr. Harbo _____
Mr. Quinn Tamm _____
Mr. Nease _____
Miss Gandy _____

VIA DIPLOMATIC AIR POUCH

COMMUNICATIONS SECTION

MAILED 12

DEC 18 1942 P.M.

FEDERAL BUREAU OF INVESTIGATION

U. S. DEPARTMENT OF JUSTICE

DEC 19 11 46 AM '42
RECEIVED READING ROOM
F. B. I.
U. S. DEPT. OF JUSTICE

80-604

October 26, 1942

JPG:VAF

80-604

MR. TRACY

b7E

RE: HENRY AUGUST LUNING, was.

On October 26, 1942, Mr. Stanley of the Laboratory in company with Messrs. Coffey, Martin, Kimball, Gatins, Douglas, and Powell visited the Laboratory of the Office of Censorship. In the course of the conversation between Mr. Stanley and Dr. Pierce and Captain Fortune of the Censorship Laboratory, the latter informed Mr. Stanley that the secret ink found in the letter which they intercepted in the above-captioned case consisted of a [redacted] inasmuch as the above subject's statement makes no mention of this secret ink being used by him, it is thought that it may be of interest to the investigative division since he apparently withheld information concerning this particular secret ink. In view of this fact, it is thought that the above subject may have withheld other important information concerning other phases of his espionage activities.

b3 Per CIA
b7E

It is true that Luning stated that he had used two secret inks, one containing lemon juice in urine and the other containing lemon juice in alcohol. It may be pointed out that these two inks are essentially simple inks while the zinc ink is of high quality and is a known German espionage ink.

Respectfully,

R. P. Coffey

Mr. Tolson _____
 Mr. E. A. Tamm _____
 Mr. Clegg _____
 Mr. Glavin _____
 Mr. Ladd _____
 Mr. Nichols _____
 Mr. Rosen _____
 Mr. Tracy _____
 Mr. Carson _____
 Mr. Coffey _____
 Mr. Hendon _____
 Mr. Kramer _____
 Mr. McGuire _____
 Mr. Quinn Tamm _____
 Mr. Nease _____
 Miss Gandy _____

RECORDED
&
INDEXED

80-604-160

FEDERAL BUREAU OF INVESTIGATION

DEC 8 1942

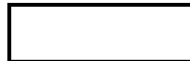
U.S. DEPARTMENT OF JUSTICE

ORIGINAL FILED

JOHN EDGAR HOOVER
DIRECTOR



JBL:ECR



Federal Bureau of Investigation
United States Department of Justice
Washington, D. C.

November 18, 1942

MEMORANDUM FOR MR. LADD

RE: HEINZ AUGUST LUNING, was;



Reference is made to the memorandum to Mr. Tracy by Mr. Coffey dated October 28, 1942, concerning a copy of a letter on display in Censorship containing secret ink, purporting to be one of the Luning letters, the secret ink being comprised of [redacted]

It will be recalled that Luning had been using only two types of ink, neither of which involved any [redacted] in its composition.

Mr. Stanley of the Laboratory advised me that specimens Q-54 and Q-55 in the Luning case relate to a letter from R. Castilla, A. Providencia, Havana, Cuba, to R. Mutz in Lisbon, Portugal. The writing in this letter, as well as the secret writing, was identified by the Laboratory as having been written by the same individual as the other Luning letters and a report was submitted to that effect.

Further laboratory examination, however, relating to the reported ink was conducted and it was determined that in view of the fact that the reaction in developing the ink resulted in the ink turning red it was concluded that the secret writing was prepared with a [redacted] ink. No laboratory report was submitted on this examination and the results of this examination were not available at the time Luning was interviewed in Cuba.

It appears, however, that our specimens Q-54 and Q-55 referred to the same communication observed by Mr. Stanley on exhibit in the Office of Censorship.

Respectfully,

CC-287

Mr. Tolson _____
Mr. E.A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____ b7E
Mr. Kramer _____
Mr. McGuire _____
Mr. Harbo _____
Mr. Quinn Tamm _____
Tele. Room _____
Mr. Nease _____
Miss Beahm _____
Miss Gandy _____

SEE OUR MEMO OF
JULY 1, 1942 IN

505

80-604-162

JPS:YAF

November 19, 1942

1935

80-604

MEMORANDUM FOR

b7D

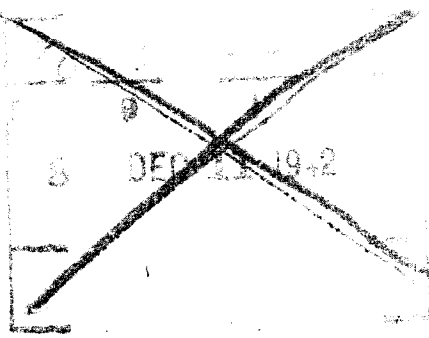
It has recently been brought to our attention that

Although we may be acquainted with this test by another name it would be appreciated if you would furnish us with the technical aspects of this test so that our Laboratory may clarify the situation or add it to their files.

MAILED 11 22 1942

DEC 1 1942

Mr. Tolson _____
Mr. E. A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Kramer _____
Mr. McGuire _____
Mr. Quinn Tamm _____
Mr. Nease _____
Miss Gandy _____



16224

RECORDED

November 19, 1942

JPS:VAT

MR. TRACY

80-604

Re: Triple Test for Dampening

Attached hereto is a blind memorandum to [redacted]
requesting information on a so-called [redacted]
[redacted] as set forth in Mr. Hince's Memorandum for the
Director, Re: [redacted]

b7D

Respectfully,

H. P. Coffey

Mr. Tolson _____
Mr. E. A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Kramer _____
Mr. McGuire _____
Tamm _____

Original cannot be located
and is not on record. When
original is received in this
division it will be filed either
with this copy or may be given
a new serial.

12/10/42

CMP
67

MAILED FROM DIVISION 10

DEC 1 1942

80-604-162

DEC 21 1942

JOHN EDGAR HOOVER
DIRECTOR



Federal Bureau of Investigation
United States Department of Justice
Washington, D. C.

December 16, 1942

OFM:EHJ

MEMORANDUM FOR MR. TRACY

RE: ~~S~~IGNS AND INSIGNIA

Mr. Tolson _____
Mr. E.A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Holloman _____
Mr. McGuire _____
Mr. Harbo _____
Mr. Quinn Tamm _____
Tele. Room _____
Mr. Nease _____
Miss Beahm _____
Miss Gandy _____

The Laboratory is collecting and maintaining a file of signs and insignia since from time to time requests are made by the various field offices to identify certain symbols appearing on documents or other pieces of evidence.

In connection with the above, there is attached hereto a leaflet entitled ~~S~~INDIAN SYMBOLS" which was submitted by Examiner H. B. Cox of the Laboratory. This leaflet has been photographed and copies have been placed in the Insignia Section of the file of writings pertaining to National Security for future reference.

Respectfully,

E. P. Coffey

1 ENCL. 1
DHO

FOR DEFENSE



RECORDED
&
INDEXED
DHO

80-604-163
1 DEC 17 1942

THE STORY OF THE TURQUOISE

TURQUOISE, from the French, meaning Turkish stone, is generally supposed to have been so designated because the gem was introduced into Europe by way of Turkey.

Turquoise occurs at comparatively few places on the globe, and strangely enough is confined almost exclusively to regions of barrenness and aridity. It is also a remarkable fact that, with a few unimportant exceptions, no occurrence is now known near which traces of prehistoric mining have not been discovered. The southwestern portion of the United States is an important source. Mines in Arizona, Colorado, Los Cerrillos Mountains, N. M., and Nevada produce stones of fine quality.

From the dawn of civilization down to the present, the Turquoise has always been held in high esteem. Marvelous virtues have been attributed to it: "The eye is strengthened by looking at a turquoise." "One who sees a turquoise early in the morning will pass a fortunate day." "The turquoise helps its owner to victory over his enemies, protects him against injury, and makes him liked by all men."

The Turquoise has long occupied a prominent place in the mythology and folklore of the Indians of the Southwest, not alone because of its wide use among them, but also as a result of the peculiar psychological appeal its color seems to make to the untutored mind. It enters into the adornment fetiches, and finds application in many ceremonials, such as the famed Snake Dance of the Hopi.

Navajos coming from the north into the barren region which they now inhabit, soon learned through contact with the Pueblo Indians the use of the turquoise, and now they are exceeded by none in their admiration for this precious stone. It is used in the Mountain Chant and the Night Chant, two of the most important Navajo ceremonies. The Navajos of the present day are clever silversmiths. Bracelets, Rings, Conchas, Buckles and other ornaments are fashioned from Coin Silver, and many are inlaid, or mounted with their favorite turquoise. The Zuni followed their example and both tribes are producing interesting specimens



INDIAN SYMBOLS

THE designs shown here and many variations of them are found in the decorations of ceremonial altars and the designs of Pottery, Baskets and Blankets, and are used extensively in Indian Design Silver. In many pieces of the latter, Turquoise in clear blue or Matrix Stones are combined effectively with these Indian Designs.



The Silversmith's Daughter

	Thunderbird.....Sacred bearer of Happiness unlimited
	Swastika.....Good Luck
	Arrow.....Protection
	Crossed Arrows.....Friendship
	Arrowhead.....Alertness
	4 Ages.....Infancy-Youth-Middle and Old Age
	Cactus.....Sign of the desert
	Gila Monster.....Sign of the desert
	Cactus Flower.....Courtship
	Horse.....Journey
	Saddle Bags.....Journey
	Bird.....Carefree—Light-hearted
	Lightning Snake
	Snake.....Defiance, Wisdom
	Thunderbird Track.....Bright Prospects
	Deer Track.....Plenty Game
	Bear Track.....Good Omen
	Rattlesnake Jaw.....Strength
	Sun Rays.....Constancy
	Headdress.....Ceremonial Dance
	Butterfly.....Everlasting Life
	Coyote Tracks

	Man.....Human Life
	Rain Clouds.....Good Prospects
	Lightning and Lightning Arrow.....Swiftmess
	Swastika with Circle...4 corners of the world —Lake in center
	Days and Nights.....Time
	Morning Stars.....Guidance
	Sun Symbols.....Happiness
	Running Water.....Constant Life
	Raindrop-Rain.....Plentiful Crops
	Hogan.....Permanent Home
	Tepee.....Temporary Home
	Sky Band.....Leading to Happiness
	Medicine Man's Eye...Wise—Watchful
	Warding Off Evil Spirits
	Mountain Range
	Big Mountain.....Abundance
	House of Water
	Lasso.....Captivity
	Fence.....Guarding good luck
	Enclosure for Ceremonial Dances
	Eagle Feathers.....Chief
	Paths Crossing

	Giver of Water....."Avany"
	Cyclone.....Force
	Rocks.....Everlasting
	Swallow.....Agility
	Lizard.....Contentment
	Frog.....Swamps
	Turtle.....Sacred
	Buffalo Horns.....Success
	Buffalo Eye.....Alertness
	Dragon Fly.....Plenty Water
	Spider.....Good Luck
	Broken Arrow.....Peace
	Morning Star and Moon.....Guidance
	Milky Way.....Sky
	Protection
	Arrows in hands of.....All Ways

JPS:GWH:EGK

November 26, 1942

16220

Original copy of letter is
and is not on record. When
original is received in Files
Division it will be filed either
with this copy or may be given
a new serial.

MR. TRACY

RE: Visit of Mr. Stanley to
Censorship Laboratory

On November 23, 1942, Captain Fortune of the Postal Censor-
ship Laboratory called Mr. Douglas of the Bureau's Censorship liaison
office and requested him to have Mr. Stanley of the Laboratory come to the
Censorship Laboratory at his earliest convenience in order to discuss the
technical aspects of the Juan Enriquez Secret Writing Case (Bureau File
No. [redacted])

b7E

Mr. Stanley informed me of the visit to the Censorship Laboratory
on the afternoon of the above date, at which time Captain Fortune, Dr.
Pearce, and Dr. Brion (phonetic) informed Mr. Stanley that the letters which
are at present in San Juan consisted of the same type of paper, the same
ink, and the submission slips which he showed Mr. Stanley contained, except
for a very few words, the entire secret ink message contained in these
letters. Captain Fortune also exhibited one photograph of one of the letters
now held in San Juan which was evidently developed by [redacted] and
which appeared to be quite legible. If the remaining photographs of these
six letters are equally legible and are sufficient for a good document
examination, then, as far as the technical aspects of the secret writing on
these six letters in this case are concerned, it would be of less value to
forward them to the Laboratory for a further secret ink examination than if
they were to be forwarded to their destination. It may be further pointed
out that some of these letters are over one month old now.

b3 Per CIA
b7E

RECORDED & INDEXED

Captain Fortune then brought up the question as to what the Bureau
desired to do with these letters; i.e., would they want the Censorship to send
them to the Bureau from San Juan, and Mr. Stanley immediately informed Captain
Fortune that he had nothing to do with the decision of condemning or releasing
letters, nor with the policy of the Bureau in regard to Censorship forwarding
the originals of these letters to the Bureau. It was pointed out to Captain
Fortune that the actual secret ink examination was only a small part of the
entire examination given to originals and that, as a result of Laboratory
findings the supervisor of the case then decides as to what the Bureau will do
with the original documents. In the course of the discussion, Captain Fortune
pointed out to Mr. Stanley that the [redacted]

b7D

Mr. Hendon [redacted]
Mr. Kramer [redacted]
Mr. McGuire [redacted] examined these letters on October 5,
1942, and received instructions from New York to release them on

Mr. Quinn Tamm

Mr. Nease

Miss Gandy

55 JAN 25 1943

Memorandum for Mr. Tracy
Page Two

16221

October 7, 1942. American Censorship submission slip SJ-X-11 con-
letter held in San Juan, which is an answer to the two letters rel.
[redacted] It is further pointed out that the original six letters
intercepted in San Juan and which are still in this Bureau were interce-
at San Juan before the two mentioned above [redacted]

b7D

Since Captain Fortune believes that the Bureau was working very
closely [redacted] it is thought by him that [redacted]

[redacted] a similar relation-
ship between American Censorship and the Bureau could be arranged. Mr.
Stanley again pointed out to Captain Fortune that he was entirely concerned
with only the technical aspects of the secret writing and that methods of
cooperation and policy would have to be taken up with the Bureau's liaison
office. However, Mr. Stanley told Captain Fortune that he would forward
this information through the proper channels to the liaison office in the
event that they are not aware of this particular instance.

In regard to the six letters of this case which are at present in
the Bureau, Mr. Stanley pointed out to Captain Fortune that the photographs
submitted of these letters were not entirely satisfactory for the purpose
of handwriting identification nor for the purpose of obtaining the full
message from the secret writing text and that it was necessary for our
Laboratory to develop these letters in an attempt to improve upon these
photographs. Mr. Stanley was informed that the letters were developed in
San Juan by means of the transfer method, and the developer [redacted] b3 Per CIA
caused a rather smeary development in places. Captain Fortune informed Mr. b7E
Stanley that the six letters that are at present in San Juan are in all
probability satisfactorily photographed since practically the entire message
on each letter has been obtained. Presumably the development of these letters
was with [redacted] although Captain Fortune intimated that transfers were
also more than likely made.

Captain Fortune also informed Mr. Stanley that the secret writing
on the letter from Jose Moura, Rio de Janeiro, Brazil, to Sra. Dona
Serafina Floriada, Calle de las Naranjas, No. 26, 60dr., Bilbao, Espana, dated
July 20, 1942, which was covered by United States secret submission slip
SJ-S-1, was prepared by the "damp sheet pressure writing method" and was
developed by means of steaming the paper. This will serve to answer the
letter from the Director to Mr. Byron Price, dated October 30, 1942, for the
attention of Mr. Theodore Koop, insofar as his request for technical data on
the secret ink used in this communication is concerned.

Respectfully,

E. P. Coffey

FEDERAL BUREAU OF INVESTIGATION

Laboratory

16222

Date

1943

Mr. Coffey	7326	Mr. Kyl	4235
Mr. Martin	7326	Mr. Larmoyeux	7326
Mr. Appel	4235	Mr. LaRock	7325E
Mr. Arnold	7326	Mr. Magee	7325C
Mr. Baughman	7325D	Mr. Marshall	4235
Mr. Beach	7120	Mr. McVay	4235
Mr. Blackburn	7334	Mr. Merritt	1410
Mr. Blaine	4235	Mr. Mesnig	7334
Mr. Bohn	4235	Mr. Millen	1410
Mr. Conrad	1410	Mr. Miller	4235
Mr. Couch	7325D	Mr. Napier	7334
Mr. Cronin	1410	Mr. Parsons	7325D
Mr. Davis	4235	Mr. Pfafman	1410
Mr. Dingle	4235	Mr. Schweitzer	1410
Mr. Driscoll	7325C	Mr. Stanley	7325F
Mr. Dunlop	1410	Mr. Swartz	1410
Mr. Feehan	4235	Mr. Thornton	7325
Mr. Frazier	7325D	Mr. White	7325F
Mr. Freimuth	7325F	Mr. M. Williams	7325D
Mr. Gasteiger	4235	Mrs. Couch	7326
Mr. Gormley	4235	Miss Frawley	7326
Mr. Gould	5700Corr	Mr. Tierney	7328
Mr. Jackson	7118	Typing Pool	5700 Corr.
Mr. Higdon	7325E	Recorders	5700 Corr.
Mr. Holland	7334	LABORATORY FILES	5700 Corr
Mr. Jenkins	7328	Stenographers	7322
Mr. Jevons	7325E	Miss Westenberg	7322 Bk. 6
6th FLOOR FILES		Miss Wolfe	7322 Bk. 6
M		Miss Rupp	7322 Bk. 6

See Me _____
 Please Handle _____
 Route to #1 Examiner

E. P. COFFEY
 Room 7326

JOHN EDGAR HOOVER
DIRECTOR



JPS:GWH

86-604

Federal Bureau of Investigation
United States Department of Justice
Washington, D. C.

November 25, 1942

MEMORANDUM FOR MR. TRACY

Re: Visit of [redacted]

On Friday, November 20, [redacted]

[redacted] called at my office in company with [redacted] and since [redacted] was [redacted]

principally interested in discussing [redacted]

[redacted] he was introduced to Mr. Stanley of the Laboratory. Mr. Stanley found [redacted] to be a very likeable fellow, a willing conversationalist on the technical questions, and a person who, although admittedly [redacted]

[redacted] appears to be well-equipped to discuss [redacted] all phases [redacted]

[redacted] was deeply impressed with [redacted]

[redacted] Mr. Stanley recalled to [redacted] the fact that the German agents are instructed to dampen their paper with ammonia solution when using their [redacted] inks, and that this fact would, therefore, tend to make most papers neutral, if not slightly alkaline, due not only to the alkalizing effect of the ammonia, but to the fact that some of the alum sizing would undoubtedly be washed from the paper. [redacted] stated that that was true.

On a recent trip by Mr. Hince of the Bureau [redacted] visited [redacted] and on that occasion was informed [redacted]

[redacted] questioning [redacted] he was not aware [redacted]

[redacted] but informed Mr. Stanley that [redacted]

GC-287

Mr. Tolson _____
Mr. E.A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Kramer _____
Mr. McGuire _____
Mr. Harbo _____
Mr. Quinn Tamm _____
Tele. Room _____
Mr. Nease _____
Miss Beahm _____
Miss Gandy _____

b3 Per CIA
b7D
b7E

INDEXED

1943

Page Two
Memo for Mr. Tracy

[redacted]
[redacted] was asked if he had any information concerning the "stearin" method of secret writing supposed to be used by German agents and he said that [redacted]

b7D

[redacted] Mr. Stanley was not in full agreement [redacted] on this point, but since such meager data is available, the method in its entirety is still vague.

In discussing recent secret ink cases, [redacted] informed Mr. Stanley that [redacted] b3 Per CIA
[redacted] b7D
[redacted] b7E

[redacted] As a result, [redacted]

Mr. Stanley informs me that the Laboratory will conduct further extensive research along this line, which at one time was abandoned due to the fact that only one or two of the secret inks, namely pyramidon and [redacted] used by the Germans, were capable of being perfectly developed by this method. In connection with this, it may be pointed out that recent submissions by the American Censorship Laboratory of photographs of secret writing developed in the Juan Enriquez (Bureau File No. [redacted] case were of developed transfers of a secret message written with an [redacted] ink, and were for the most part illegible. This is one of the difficulties and handicaps of the transfer method.

[redacted] requested of Mr. Stanley information concerning [redacted] and Mr. Stanley introduced [redacted] to Mr. Dunlop of the Laboratory, who showed [redacted] photographs of positions in which these microfilm messages had been found and also photographs of the messages contained thereon. Mr. Dunlop informed [redacted] that he had discussed at great length [redacted]

b7D

[redacted] the methods which are employed by the Laboratory in regard to photographing these microfilm messages. As a result of the suggestion [redacted] in regard [redacted]

[redacted] I informed [redacted] that we would be glad to look into that matter and let him know as soon as possible what the results of our experiments were. [redacted] advised Mr. Dunlop that they had as yet

Page Three
Memo for Mr. Tracy

[REDACTED]

b7D

Experiments will be conducted in the near future on [REDACTED]
[REDACTED]
in order that [REDACTED] can be informed as to the possibility of
[REDACTED]

Respectfully,


E. P. Coffey

FEDERAL BUREAU OF INVESTIGATION

Files Division

Room 6646 Jan. 15, 1942

TO:

☐ Director	☐ Mr. Seyfarth
☐ Mr. Tolson	☐ Mr. Medler
☐ Mr. Nichols	☐ Mr. Pond
☐ Mr. Glavin	☐ Classifying Unit
☐ Mr. Nease	☐ Central Hold Desk
☐ Chief Clerk	☐ Consolidation Unit
☐ Mr. Campbell	☐ Filing Unit
☐ M	☐ Front Office
	☐ Ident. & Stat. Files
	☐ Numbering Unit
☐ Mr. Skousen-Comm.	☐ Personnel Files
☒ Laboratory	☐ Routing Unit
☐ Ident. Div.	☐ Searching Unit
☐ Mr. Patterson	☐ Typing Unit
☐ Mr. Waikart	☐ Miss Bauer
☐ Mr. Willett	☐ Miss Scallon
☐ Mr. Gere	☐ Mrs. Smith
☐ Mr. McBride	☐ Miss Walker
☐ Mr. Brown	☐ Miss Werner
☐ M	☐ M
☐ M	☐ M

☐ See Me

☐ Phone Me

☐ Please Handle

☐ Note and Return

*As per attached
adendum.*

REC:GWH

RECORDED

80-604-167

Date: January 8, 1943

To: SAC, Seattle

From: J. Edgar Hoover - Director, Federal Bureau of Investigation

Subject: Manufacturers of Secret Ink.

Reference is made to your letter of December 31, 1942, in which the identities and addresses of manufacturers of secret ink were requested.

A review of the Bureau's files on the above subject disclosed the following, none of which are located in Milwaukee, Wisconsin:

The National Marking Machine Company
4026 Cherry Street, Northside
Cincinnati, Ohio

Manufacturers of invisible marking ink and machinery for laundries.

The Continental Lithograph Corporation
72nd Street and St. Clair Avenue
Cleveland, Ohio

Manufacturers of laundry invisible marking ink, luminous paints, and powders.

H. C. Evans and Company
1528 West Adams Street
Chicago, Illinois

Marketers of crooked gambling devices, including invisible "luminous" inks for marking playing cards.

Mr. Tolson_____

Mr. E. A. Tamm_____

Mr. Clegg_____

Mr. Glavin_____

Mr. Ladd_____

Mr. Nichols_____

Mr. Rosen_____

Mr. Tracy_____

Mr. _____

New York Toy and Game Company

239 4th Avenue, New York, New York

Jobbers for toys and games, including "G-Man" sets which include an "invisible ink."

It is pointed out that the manufacture of secret or sympathetic ink is carried on by a number of firms for novelty sales companies and for use by laundries for marking clothing, but the manufacture of secret

**Federal Bureau of Investigation
United States Department of Justice**

Seattle, Washington

December 31, 1942

Director
Federal Bureau of Investigation
Washington, D. C.

Attention: Technical Laboratory

Re: MANUFACTURERS OF SECRET INK

Dear Sir:

For the information of this office, it is requested that you advise of the identities and addresses of manufacturers of secret ink.

I am particularly interested in any manufacturers of this ink who might presently be located in Milwaukee, Wisconsin, and a copy of this letter is being addressed to the Milwaukee Office with a similar request.

~~DEFERRED RECORDING~~ *fr*

Very truly yours,

H. B. Fletcher

H. B. FLETCHER
Special Agent in Charge

TEN:GS
AIR MAIL

cc (2) Milwaukee

RECORDED

80-604-167
B

detention & production of L. & P. Ink

HP

Federal Bureau of Investigation

United States Department of Justice
735 Federal Building
Milwaukee, Wisconsin
January 25, 1943

Director, FBI

ATTENTION: Technical Laboratory

Re: Manufacturers of Secret Ink

Dear Sir:

In reply to a letter received from the Seattle Field Division dated December 31, 1942 in which that office requested both of the Technical Laboratory and of the Milwaukee Field Division information concerning manufacturers of Secret Ink in Milwaukee, this office advises that an investigation was conducted and as a result reports that there are no known manufacturers of such ink in Milwaukee, Wisconsin.

Very truly yours,



H. T. O'Connor
Special Agent in Charge

2 cc to Seattle

HVL:gvr

RECORDED

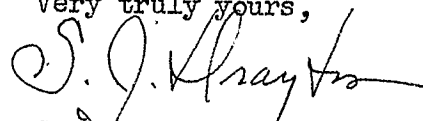
2c
[80-604-169]

Director

1/30/43

use by the Armed Forces and that information has been received that such a match has been found in the possession of Japanese Forces in the Pacific area.

Very truly yours,



S. J. DRAYTON, SAC

SSP:CH
66-699

Enc. 1

Post Office Box 812
Chicago, Illinois

Att'n. Technical Laboratory

January 30, 1943

Director, FBI

Dear Sir:

Re: MATCH HEADING COMPOUND

Reference is made to your letter of January 20th instant wherein you requested that this office contact the Arrow Match Corporation, 3001-33 West Grand Ave., Chicago, to obtain two (2) quarts of match heading compound, preferably one (1) quart of red material and one (1) quart of green material.

There is being transmitted under separate cover one (1) quart of green material and approximately one (1) quart of red material which were obtained from the above company. This shipment is being sent to you under Government Bill of Lading No. J-236523, the original and one copy of which are enclosed herewith.

MR. CHARLES LEVEY of the Arrow Match Corporation who furnished this material to us free of charge advised Special Agent STANLEY S. PECK of this office that if it was necessary, we would be able to obtain additional material from his company. He also stated that in the event such information were desired, that he would gladly furnish the list of ingredients used in this material knowing that if he did this, the interests of his company would be protected. He also advised that the only difference in these two materials was in the color and it was ascertained that his company has different runs of various colors on different days and that possibly other colors could be obtained if the Bureau so desires.

This material when made up by the Company and used is in a liquid form and becomes hard when allowed to stand at a temperature under one hundred degrees; according to MR. LEVEY. He advised that the application of heat by either water or steam would be the approved method of removing this material from the glass containers it is being shipped in, the application of this heat reverting the material back to its liquid form. It is suggested that either the use of a double boiler or just setting the jar in hot water would suffice.

For your information MR. LEVEY advised that various match companies throughout the country are presently conducting experiments at the request

UNITED STATES OF AMERICA

No. **J- 236523**



Bill to **Federal Bureau of Investigation, U.S. Dept. of Justice**
(Department or Establishment and Bureau or Service)

SEE REVERSE
HEREOF

(Appropriation chargeable)
FBI, 1900 Bankers Bldg., Chicago, Illinois
(Issuing office)

S. J. DRAYTON, Special Agent in Charge
(Name and title of issuing officer)

1/30, 19 **43**
(Date issued)

**GOVERNMENT BILL
OF LADING**

ORIGINAL

Received from **S. J. DRAYTON, FBI, U. S. Dept. of Justice**
(Consignor)

by the **American Railway Express Company**
(Name of transportation company)

in apparent good order and condition (contents and value unknown), to be forwarded subject to conditions stated on the reverse hereof,

from **Chicago, Illinois**
(Shipping point)

to **Washington, D. C.**
(Destination)

by the said company and connecting lines, there to be delivered in like good order and condition to **Director, Attn. Tech. Lab.**
(Consignee)

Federal Bureau of Investigation, U. S. Dept. of Justice, Washington, D. C.

via **Express**

(Route journey only when some substantial interest of the Government is subserved thereby)

MARKS	NUMBERS ON PACKAGES	NUMBER AND KIND OF PACKAGES	DESCRIPTION OF ARTICLES (Observe strictly carrier's freight classification. Avoid trade or technical names)	WEIGHTS *
		1	Technical Supplies	

Pick-up service at origin was **not** by the Government.

(Signature of Consignor)

Size car ordered **1** ft. Size car furnished **1** ft. Date furnished **1/30** Initials **Per** Car No. **1**

TARIFF AUTHORITY
(To be filled in by general office rendering account)

American Railway Express Agency
(Name of transportation company)

AUTHORITY FOR SHIPMENT

1/30, 19 **43** **Per**
(Date) (Agent)

CERTIFICATE OF ISSUING OFFICER

(To be filled out when this bill of lading is issued for use by contractor in making shipment)

Contract No. **1**, or Purchase Order No. **1**, dated **1/30**

(Issuing officer)

PRINT OUT IN THIS CERTIFICATE

JWM:MJC 1-11-43

T. D. Beach memo for Mr. Coffey
Re: Secret Writing

Setting forth new method for concealing and carrying
secret ink worked out and developed by Mr. Magee in the
Tech. Lab.

JWM:MJC 1-11-43

T. D. Beach memo for Mr. Coffey
Re: Secret Writing

... for concealing and carrying
... the

CONTRIBUTOR OF FINGERPRINTS	NAME AND NUMBER	ARR. RE
PD, McAllen, Texas	John Wesley Hall #1106	
PD, Las Vegas, N. Mex.	John Wesley Hall #	
SPol., Santa Fe, N. Mex.	John Wesley Hall #	
SO, Amarillo, Texas	W. John Hall #5016	
PD, Amarillo, Texas	John W. Hall #6009	
SO, Amarillo, Texas	John Wesley Hall #5016	
PD, Los Angeles, Calif.	John Wesley Hall #42251	

JOHN EDGAR HOOVER
DIRECTOR



Federal Bureau of Investigation
United States Department of Justice
Washington, D. C.

January 11, 1943

CC-287

STRICTLY CONFIDENTIAL

JWM:MJC

MEMORANDUM FOR MR. COFFEY

Re: Secret Writing

Mr. Tolson _____
Mr. E. A. Tamm _____
Mr. Clegg _____
Mr. Glavin _____
Mr. Ladd _____
Mr. Nichols _____
Mr. Rosen _____
Mr. Tracy _____
Mr. Carson _____
Mr. Coffey _____
Mr. Hendon _____
Mr. Kramer _____
Mr. McGuire _____
Mr. Harbo _____
Mr. Quinn Tamm _____
Tele. Room _____
Mr. Nease _____
Miss Beahm _____
Miss Gandy _____

I think you will be interested in a new method for concealing and carrying secret ink. This process was worked out and developed by Mr. Magee in the Technical Laboratory.

The process involves the concealment of the secret ink chemicals beneath the head of a match. The steps in the production of such a match are as follows:

1. The head of an ordinary safety match is removed after boiling in sodium hydrosulfite solution.
2. A 1/16" hole is drilled 1/16" deep in the end of the dried sticks.
3. This hole is filled with the writing material until a small bead remains on the tip of the stick.
4. The match stick is then dipped in paraffin at 75 degrees C. Approximately 1/2" of the stick is immersed.
5. The stick is next dipped into the match heading compound and the finished match allowed to dry.
6. In order for the stick to be used in secret writing, the head of the match is removed and the tip of the stick sharpened.

The attached photograph, prepared by Mr. Dunlop, illustrates the steps in the concealment of the secret ink chemical.

Page two

RECOMMENDATION:

OK. But not to all agents because such stamp designation is had from security stamp.
It is recommended that a supply of these matches be prepared in the Technical Laboratory for use in the Bureau's intelligence work. It is further recommended that one or more boxes of these matches be made available to each agent in SIS work and that the matches be used only as directed by the Laboratory. One match could be used for each communication and when the match has served its purpose, it could be destroyed by burning.

EW. If more matches are to be prepared, arrangements will have to be made for securing additional match heading compound. It is suggested that an agent from the Chicago Office contact the Arrow Match Corporation, 3001-33 West Grand Avenue, Chicago, Illinois and obtain two quarts of heading compound. It is believed desirable to have two different colors, so a quart of each should be obtained. It is further suggested that an agent of the New York Office contact the Federal Match Division of Pan-American Match Corporation, 8 West 40th Street, New York, New York and obtain one quart each of two different colors of match heading compound. Federal Match as a manufacturing plant at Hudson, New York. *OK*

Respectfully,

T. D. Beach
T. D. Beach

Addendum: Because of the confidential nature of this matter, sample matches are not being enclosed herewith, but 6 such matches are being furnished to you under separate cover.